Cub Cadet®

Power Equipment

Owner's Manual

45″ SNOW THROWER ATTACHMENT

Model Number 450

NOTE: The following is required to assemble snow thrower to tractor.

ALL TRACTORS W/MANUAL LIFT: MANUAL LIFT BRACKET AND HELPER SPRING KIT Model 449

1572 (710), 1872 (720), 1912 (982), 1914 (986) and 2072 (730 and 731) TRACTORS: CARRIAGE BRACKET EXTENSION KIT Model 449

Important:

Read Safety Rules and Instructions Carefully

Thank you for purchasing an American-built product.

CUB CADET CORPORATION • P.O. BOX 36930 • CLEVELAND, OHIO 44136

SAFE OPERATION PRACTICES

TRAINING

1. Read the owner's guide instruction manual carefully. Be thoroughly familiar with the controls and proper use of the equipment. Know how to stop the unit and disengage the controls quickly.
2. Never allow children to operate equipment. Never allow adults to operate equipment without proper instructions.
3. Keep the area of operation clear of all persons, especially small children and pets.
4. Exercise caution to avoid slipping or falling, when operating in reverse.

PREPARATION

1. Thoroughly inspect the area where the equipment is to be used and remove all door mats, sleds, boards, wires and other foreign objects.
2. Disengage all clutches and shift into neutral before starting engine.
3. Do not operate equipment without wearing adequate winter outer garments. Wear footwear which will improve footing on slippery surfaces.
4. Handle fuel with care. It is highly flammable.
   (A) Use approved fuel container.
   (B) Never add fuel to a running engine or hot engine.
   (C) Fill fuel tank outdoors with extreme care. Never fill fuel tank indoors.
   (D) Replace gasoline cap securely and wipe up spilled fuel.
5. Use a grounded three wire plug-in for all units with electric drive motors or electric starting motors.
6. Adjust collector housing height to clear gravel or crushed rock surface.
7. Never attempt to make any adjustments while engine is running (except where specifically recommended by manufacturer).
8. Let engine and machine adjust to outdoor temperature before starting to clear snow.

OPERATION

1. Do not put hands or feet near rotating parts. Keep clear of discharge opening at all times.
2. Exercise extreme caution when operating on or crossing a gravel drive, walks, or roads. Stay alert for hidden hazards or traffic. Do not carry passengers.
3. After striking a foreign object, stop the engine, remove wire from spark plug, thoroughly inspect the snow thrower for any damage, and repair the damage before restarting and operating the snow thrower.
4. If the snow thrower should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.
5. Stop engine whenever you leave the operating position, before unclogging the collector/impeller housing or discharge guide, and making any repairs, adjustments, or inspections.
6. Take all possible precautions when leaving the unit unattended. Disengage the power take-off, lower the attachment, shift into neutral, set the parking brake, stop the engine, and remove the key.
7. When cleaning, repairing, or inspecting, make certain collector/impeller and all moving parts have stopped. Disconnect spark plug wire and keep away from plug to prevent accidental starting.
8. Do not run engine indoors, except when starting engine and for transporting snow thrower in or out of building. Open doors, exhaust fumes are dangerous.
9. Do not clear snow across the face of slopes. Exercise extreme caution when changing direction on slopes. Do not attempt to clear steep slopes.
10. Never operate snow thrower without guards, plates, or other safety protection devices in place.
11. Never operate snow thrower near glass enclosure, automobiles, window wells, drop-off, etc., without proper adjustment of snow thrower discharge angle. Keep children and pets away.
12. Do not overload machine capacity by attempting to clear snow at too fast a rate.
13. Never operate machine at high transport speeds on slippery surfaces. Use care when backing.
14. Never direct discharge at bystanders or allow anyone in front of unit.
15. Disengage power to collector/impeller when transporting or not in use.
16. Use only attachments and accessories approved by the manufacturer of snow thrower (such as wheel weights, counter weights, cabs, etc.).
17. Never operate the snow thrower without good visibility or light. Always be sure of your footing and keep a firm hold on the handles and walk, never run.

MAINTENANCE AND STORAGE

1. Check shear bolts, engine mounting bolts, etc., at frequent intervals for proper tightness to be sure equipment is in safe working condition.
2. Never store machine with fuel in the fuel tank inside a building where open flame or spark is present. Allow engine to cool before storing in any enclosure.
3. Always refer to owner's guide instructions for important details if snow thrower is to be stored for an extended period.

NOTE

It is suggested that this manual be read in its entirety before attempting to assemble or operate. Keep this manual in a safe place for future reference and for ordering replacement parts.

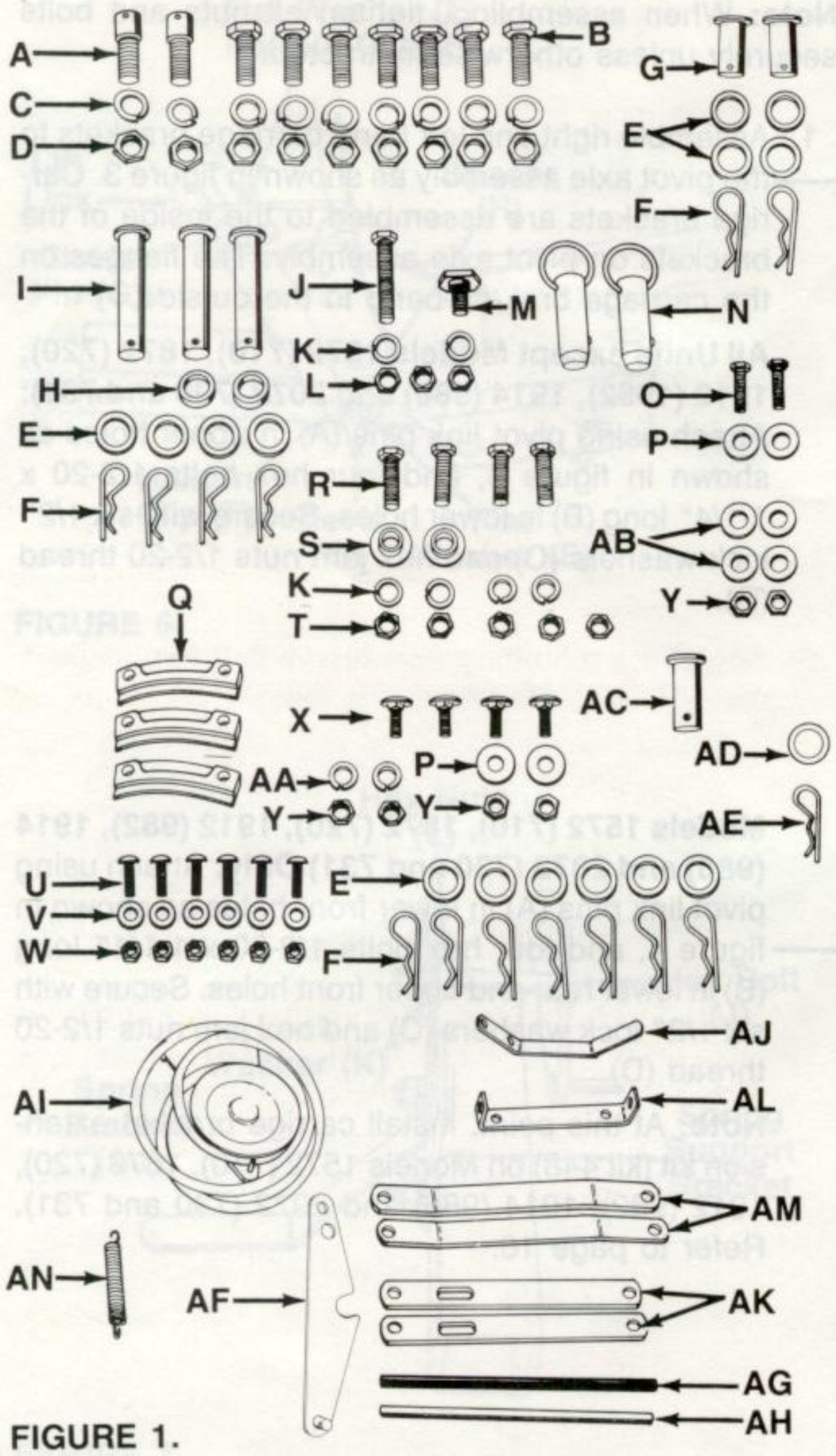


FIGURE 1.

*The augers are secured to the spiral shaft with two hex bolts and hex lock nuts (see Ref. Nos. 41 and 49 on page 12). If you hit a foreign object or ice jam, the snow thrower is designed so that the hex bolts will shear. Two replacement hex bolts and nuts are provided in the hardware pack for your convenience. Store in a safe place until needed.

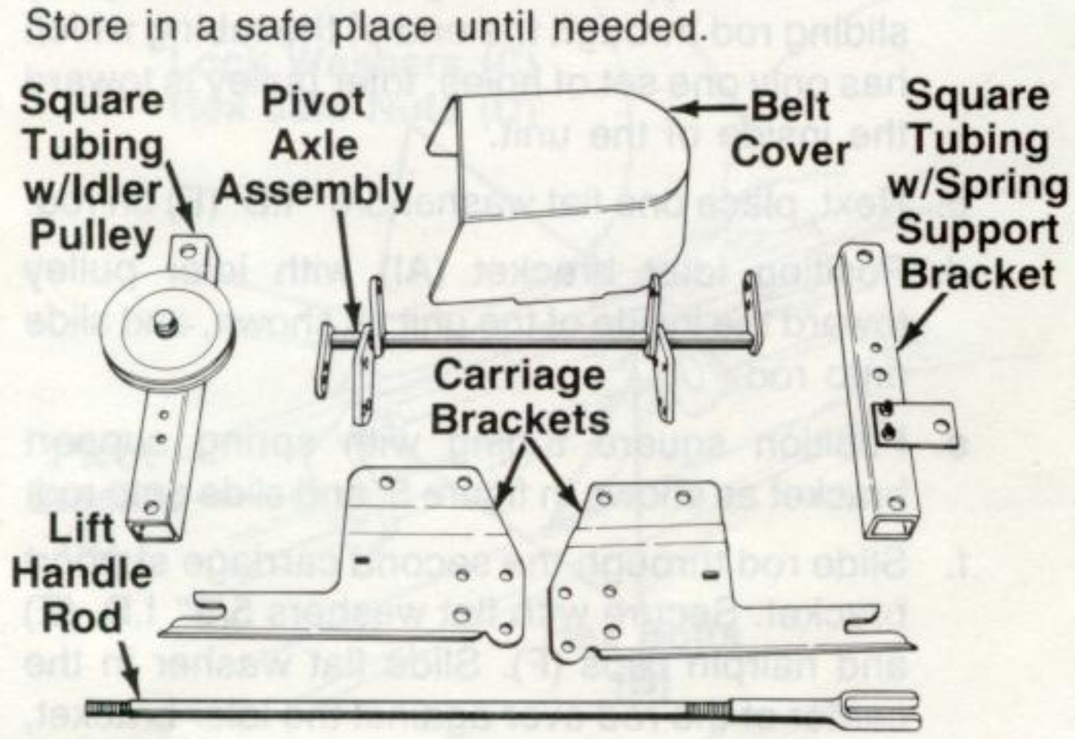


FIGURE 2.

ASSEMBLY INSTRUCTIONS

This instruction manual covers attaching the snow thrower to various models of Cub Cadet Tractors. Follow only those instructions which pertain to your unit. Not all parts will be used on all tractors.

Remove the snow thrower attachment and all parts from the carton and carton inserts. Make certain all parts and literature have been removed before the carton is discarded.

Contents of Hardware Pack (See Figure 1):

A	(2)	Pivot Link Pins
B	(7)	Hex Bolts 1/2-20 x 1-1/4″ Long
C	(9)	Lock Washers 1/2″ I.D.
D	(9)	Hex Jam Nuts 1/2-20 Thread
E	(14)	Flat Washers 5/8″ I.D.
F	(13)	Hairpin Clips
G	(2)	Clevis Pins 1-1/4″ Long
H	(2)	Spacers
I	(3)	Clevis Pins 3″ Long
J	(1)	Hex Bolt 3/8-16 x 2-1/4″ Long
K	(6)	Lock Washers 3/8″ I.D.
L	(3)	Hex Nuts 3/8-16 Thread
M	(1)	Shoulder Bolt
N	(2)	Quick Pins
O	(2)	Hex Bolts 5/16-24 x 1″ Long
P	(4)	Belleville Washers 5/16″ I.D.
Q	(3)	Chute Flange Keepers
R	(4)	Hex Bolts 3/8-24 x 1-1/4″ Long
S	(2)	Shoulder Spacers
T	(5)	Hex Lock Nuts 3/8-24 Thread
U	(6)	Truss Machine Screws 1/4-20 x 3/4″ Long
V	(6)	Flat Washers 1/4″ I.D.
W	(6)	Hex Lock Nuts 1/4-20 Thread
X	(4)	Carriage Bolts 5/16-18 x 3/4″ Long
Y	(6)	Hex Nuts 5/16-18 Thread
AA	(2)	Lock Washers 5/16″ I.D.
AB	(4)	Flat Washers 5/16″ I.D. x 7/8″ O.D.
AC	(1)	Clevis Pin 1-3/4″ Long
AD	(1)	Flat Washer 1/2″ I.D.
AF	(1)	Lift Handle Extension Bracket
AG	(1)	Rod—5/8″ Diameter
AH	(1)	Rod—1/2″ Diameter
AI	(1)	Idler Bracket
AJ	(1)	Spring Bracket
AK	(2)	Lift Links
AL	(1)	Pivot Bracket
AM	(2)	Pivot Links
AN	(1)	Spring
AO	(2)	Hex Bolts 5/16-18 x 1-3/4″ Long*
AP	(2)	Hex Lock Nuts 5/16-18 Thread*

Loose Parts in Carton (See Figure 2):

(1) Belt Cover
(1) Pivot Axle Assembly
(2) Carriage Brackets—R.H. and L.H.
(1) Square Tubing w/Idler Pulley
(1) Square Tubing w/Spring Support Bracket
(1) Lift Handle Rod
(1) Chute Assembly (Not Shown)
(1) Chute Crank w/Support Tubing (Not Shown)

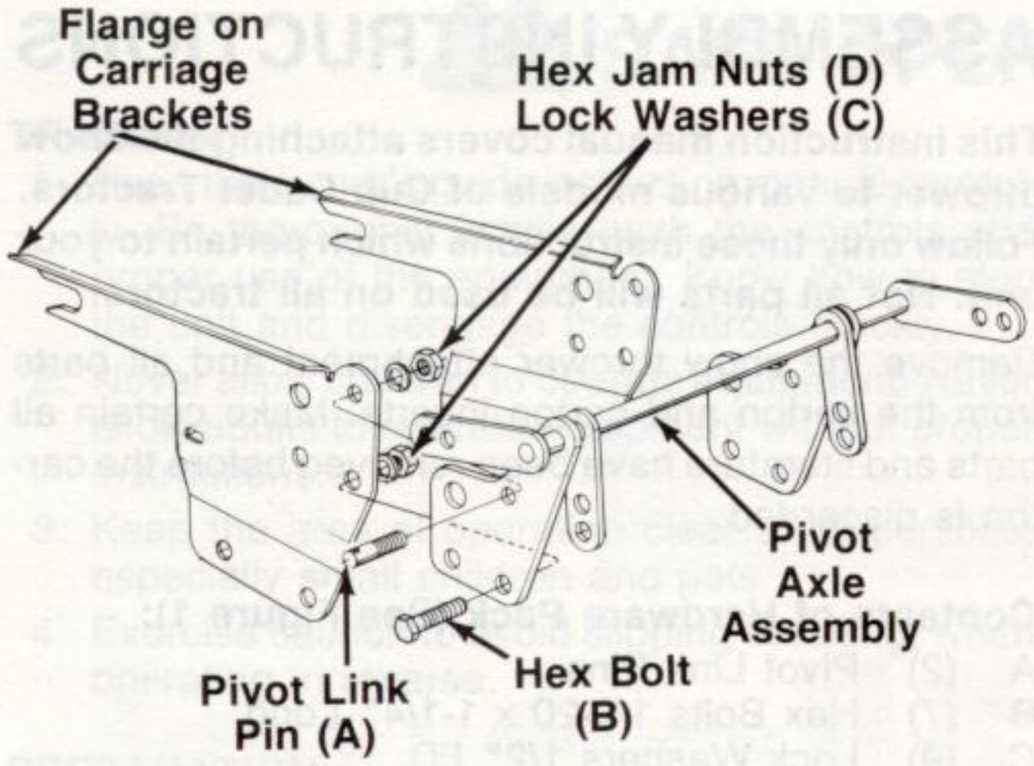


FIGURE 3.—All Units Except Models 1572 (710), 1872 (720), 1912 (982), 1914 (986) and 2072 (730 and 731)

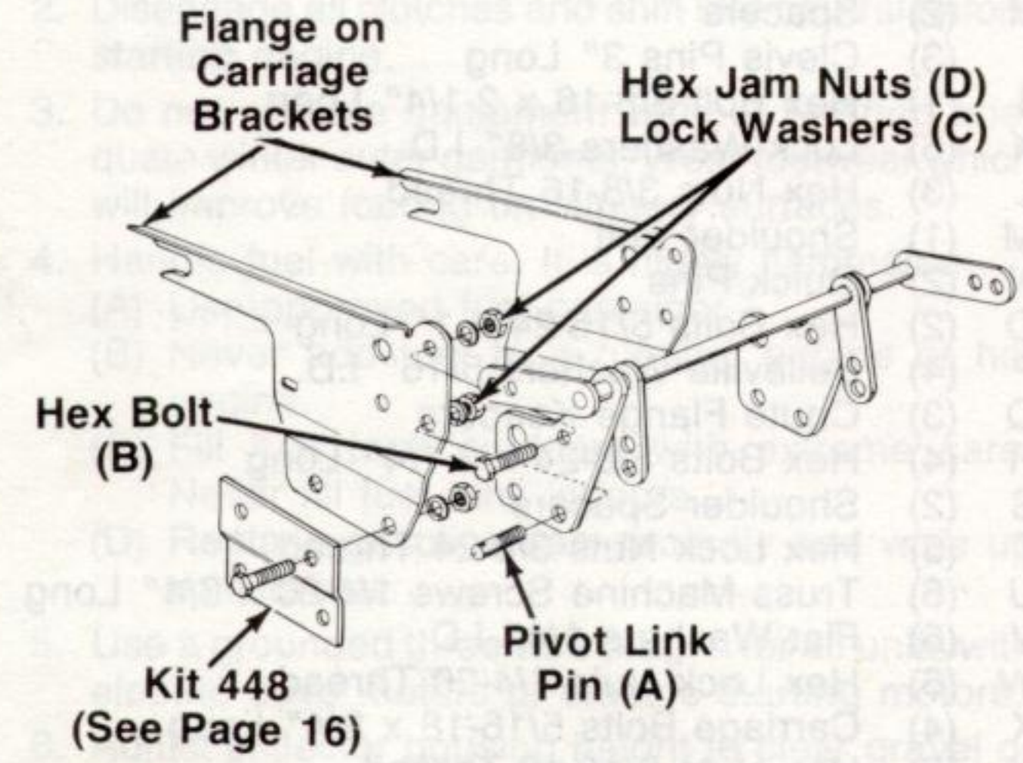


FIGURE 4.—Models 1572 (710), 1872 (720), 1912 (982), 1914 (986) and 2072 (730 and 731)

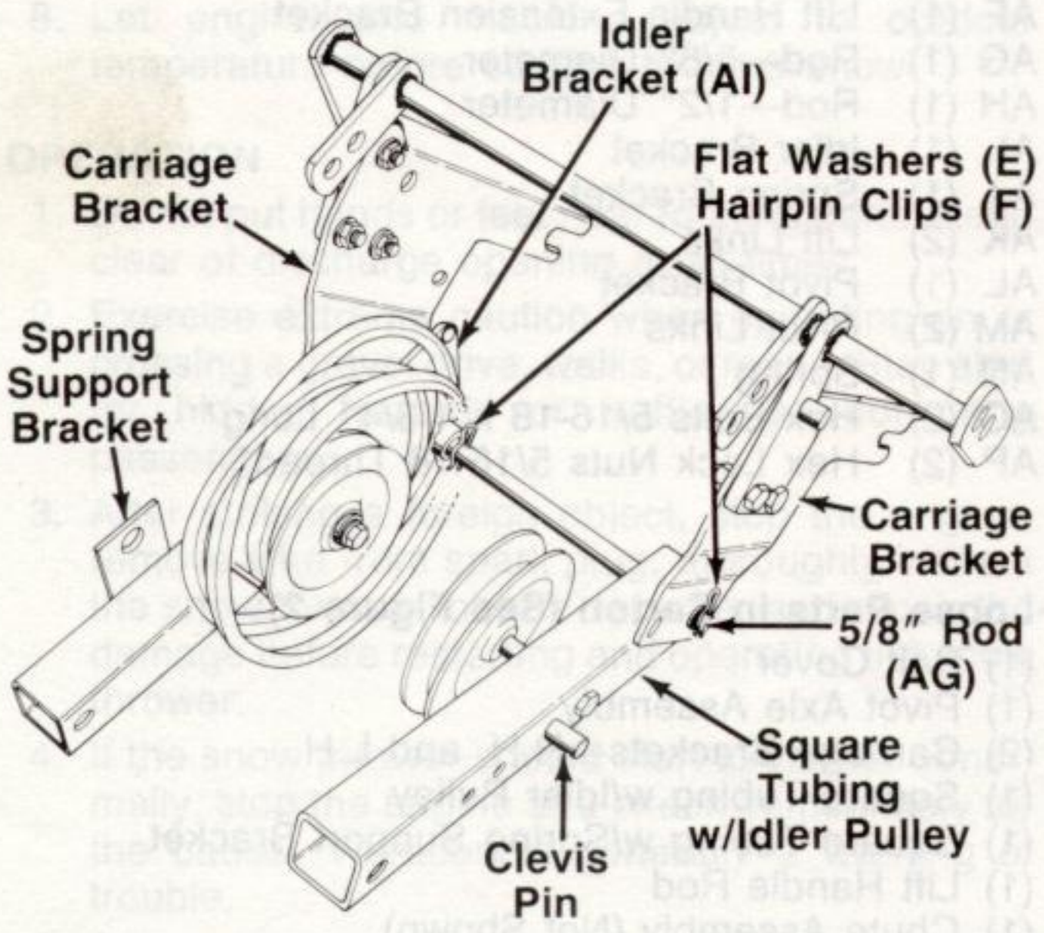


FIGURE 5.

Note: When assembling, tighten all nuts and bolts securely unless otherwise instructed.

1. Assemble right and left hand carriage brackets to the pivot axle assembly as shown in figure 3. Carrige brackets are assembled to the inside of the brackets on pivot axle assembly. The flanges on the carriage brakets bend to the outside.

   All Units except Models 1572 (710), 1872 (720), 1912 (1982), 1914 (986) and 2072 (730 and 731): Attach using pivot link pins (A) in upper holes as shown in figure 3, and four hex bolts 1/2-20 x 1-1/4″ long (B) in lower holes. Secure with six 1/2″ lock washers (C) and hex jam nuts 1/2-20 thread (D).

   Models 1572 (710), 1872 (720), 1912 (982), 1914 (986) and 2072 (730 and 731) Only: Attach using pivot link pins (A) in lower front holes as shown in figure 4, and four hex bolts 1/2-20 x 1-1/4″ long (B) in lower rear and upper front holes. Secure with six 1/2″ lock washers (C) and hex jam nuts 1/2-20 thread (D).

   Note: At this point, install carrige bracket extension kit (kit 448) on Models 1572 (710), 1872 (720), 1912 (982), 1914 (986) and 2072 (730 and 731). Refer to page 16.

2. Attach square tubings as follows.
   a. Slide the end of the 5/8″ diameter rod (AG) that has two holes through the hole in the carriage bracket shown in figure 5.
   b. Attach the square tubing with idler pulley, by sliding rod through the end of the tubing which has only one set of holes. Idler pulley is toward the inside of the unit.
   c. Next, place one flat washer 5/8″ I.D. (E) on rod.
   d. Position idler bracket (AI) with idler pulley toward the inside of the unit as shown, and slide onto rod.
   e. Position square tubing with spring support bracket as shown in figure 5, and slide onto rod.
   f. Slide rod through the second carriage support bracket. Secure with flat washers 5/8″ I.D. (E) and hairpin clips (F). Slide flat washer in the center of the rod over against the idler bracket, and secure with another hairpin clip (F).

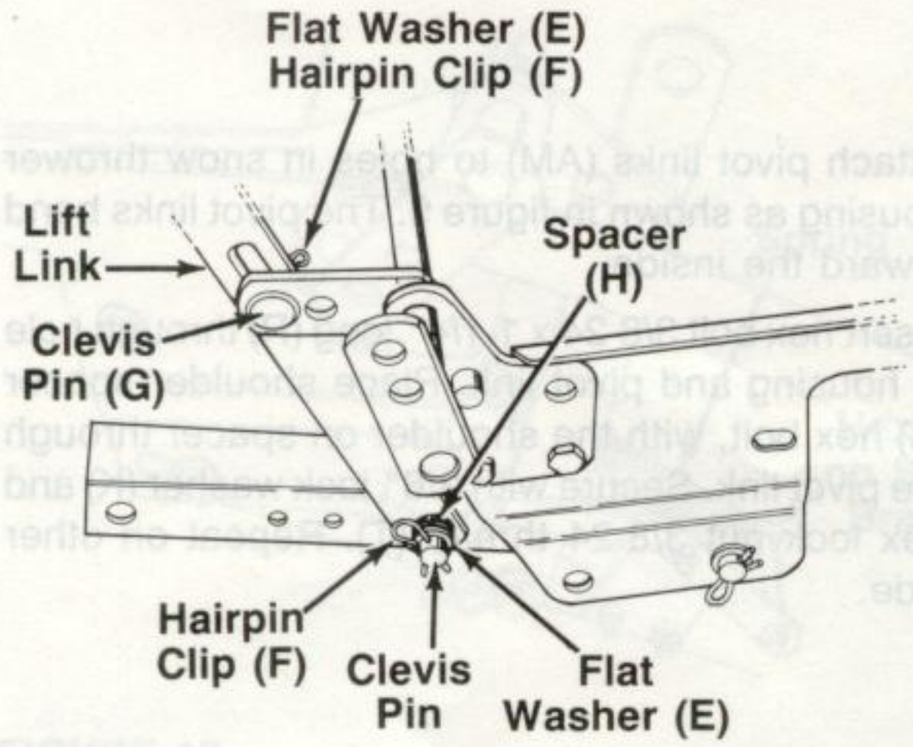


FIGURE 6.

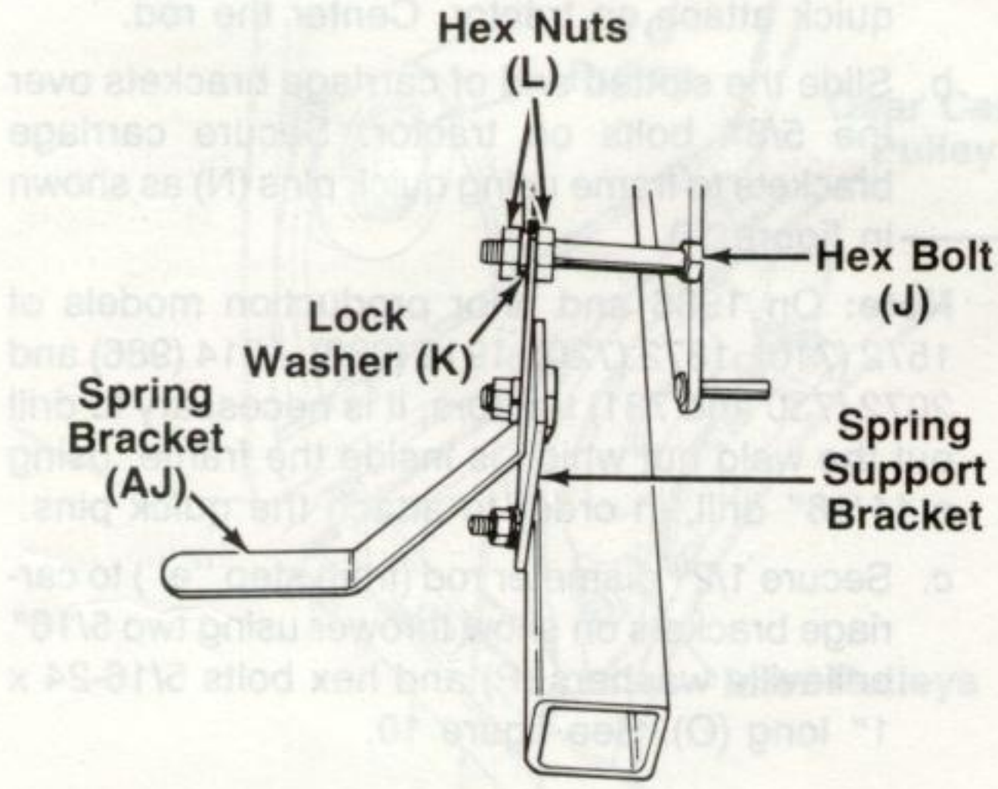


FIGURE 7.

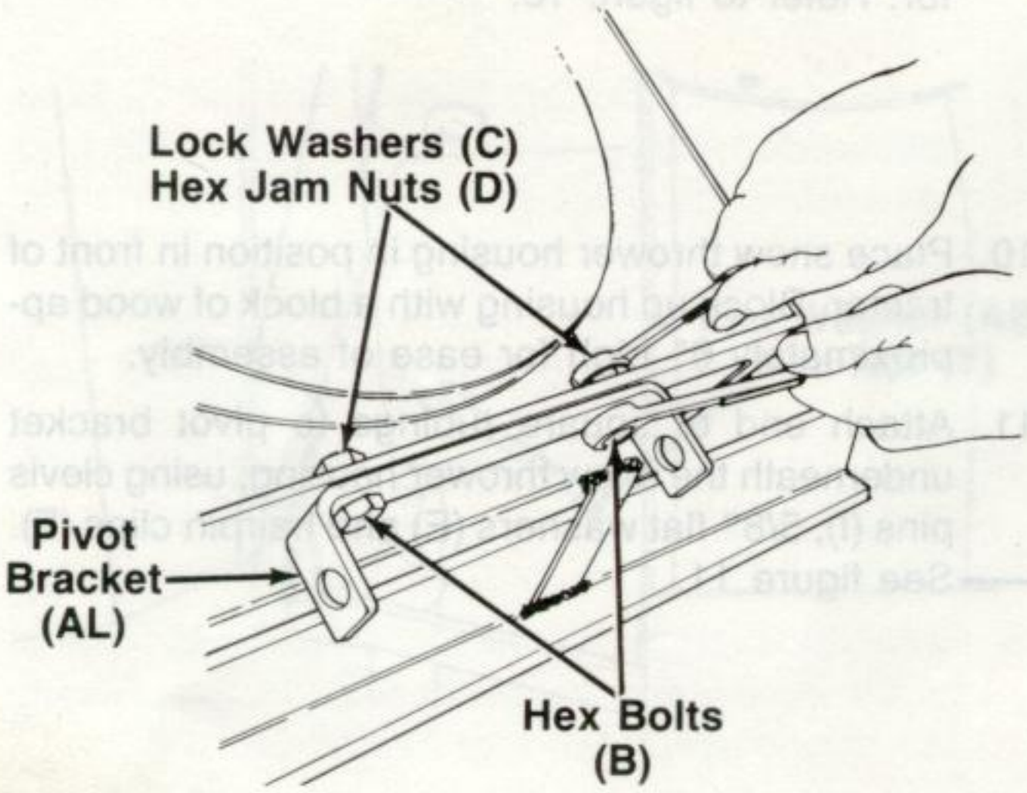


FIGURE 8.

3. Attach lift links (AK) as follows.
   a. The slotted holes in the lift links go toward the top. Place bottom hole in one lift link over the clevis pin already attached to the square tubing with idler pulley. See figure 6.
   b. Place spacer (H) over clevis pin, then flat washer (E). Secure with hairpin clip (F).
   c. Place the lift link on the inside of the bracket on pivot axle assembly as shown. Place one flat washer (E) on clevis pin 1-1/4″ long (G). Insert clevis pin through outside hole on bracket on pivot axle assembly and slotted hole in lift link. Secure with another flat washer (E) and hairpin clip (F).

   Note: On Models 1572 (710), 1872 (720), 1912 (982), 1914 (986) and 2072 (730 and 731), use the top hole on lift link instead of the slotted hole.

   d. On the other side of the unit, place one clevis pin 3″ long (I) through hole in square tubing closest to the spring support bracket. Place bottom hole in lift link over clevis pin. Place spacer (H) on clevis pin, and secure with one flat washer (E) and hairpin clip (F).
   e. Repeat instructions in step ''c'' to secure the top of the lift link.
4. Thread one hex nut 3/8-16 (L) onto hex bolt 3/8-16 x 2-1/4″ long (J). Insert bolt into top hole on spring bracket (AJ) as shown in figure 7, and secure with 3/8″ lock washer (K) and another hex nut (L).
5. Insert shoulder bolt (M) through spring support bracket and second hole in spring bracket. Secure with 3/8″ lock washer (K) and hex nut (L).
6. Mount the pivot bracket (AL) to the bottom of the snow thrower housing using two hex bolts 1/2-20 x 1-1/4″ long (B), 1/2″ lock washers (C) and hex jam nuts 1/2-20 thread (D). Heads of the bolts are to the bottom of the housing. See figure 8.

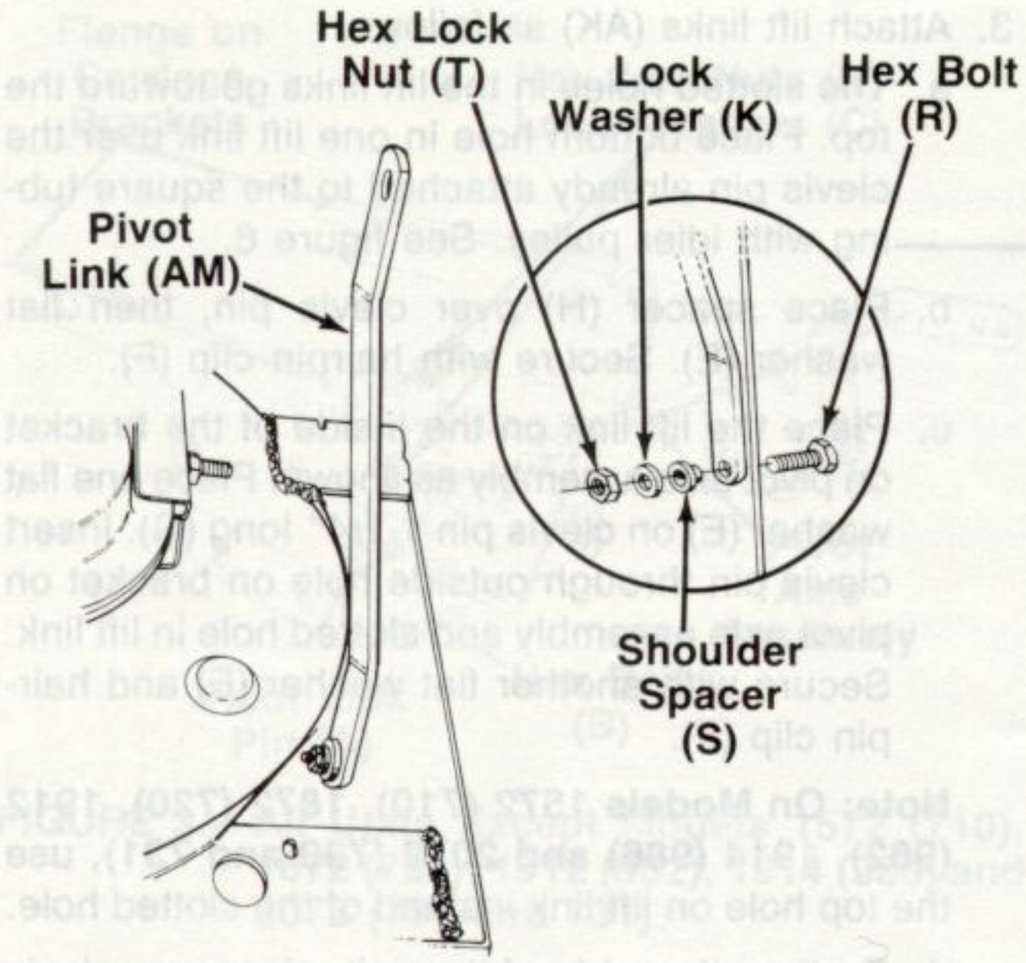


FIGURE 9.

7. Attach pivot links (AM) to holes in snow thrower housing as shown in figure 9. The pivot links bend toward the inside.

   Insert hex bolt 3/8-24 x 1-1/4″ long (R) through hole in housing and pivot link. Place shoulder spacer (S) hex bolt, with the shoulder on spacer through the pivot link. Secure with 3/8″ lock washer (K) and hex lock nut 3/8-24 thread (T). Repeat on other side.

8. Attach the mounting sub-assembly (from steps 1 through 5) to the tractor as follows.
   a. Place the 1/2″ diameter rod (AH) into the front quick attach on tractor. Center the rod.
   b. Slide the slotted end of carriage brackets over the 5/8″ bolts on tractor. Secure carriage brackets to frame using quick pins (N) as shown in figure 10.

   Note: On 1986 and prior production models of 1572 (710), 1872 (720), 1912 (982), 1914 (986) and 2072 (730 and 731) tractors, it is necessary to drill out the weld nut which is inside the frame, using a 11/16″ drill, in order to attach the quick pins.
   c. Secure 1/2″ diameter rod (from step ''a'') to carriage brackets on snow thrower using two 5/16″ belleville washers (P) and hex bolts 5/16-24 x 1″ long (O). See figure 10.

   Note: It is not necessary to remove this rod from the snow thrower when removing the snow thrower from the tractor.

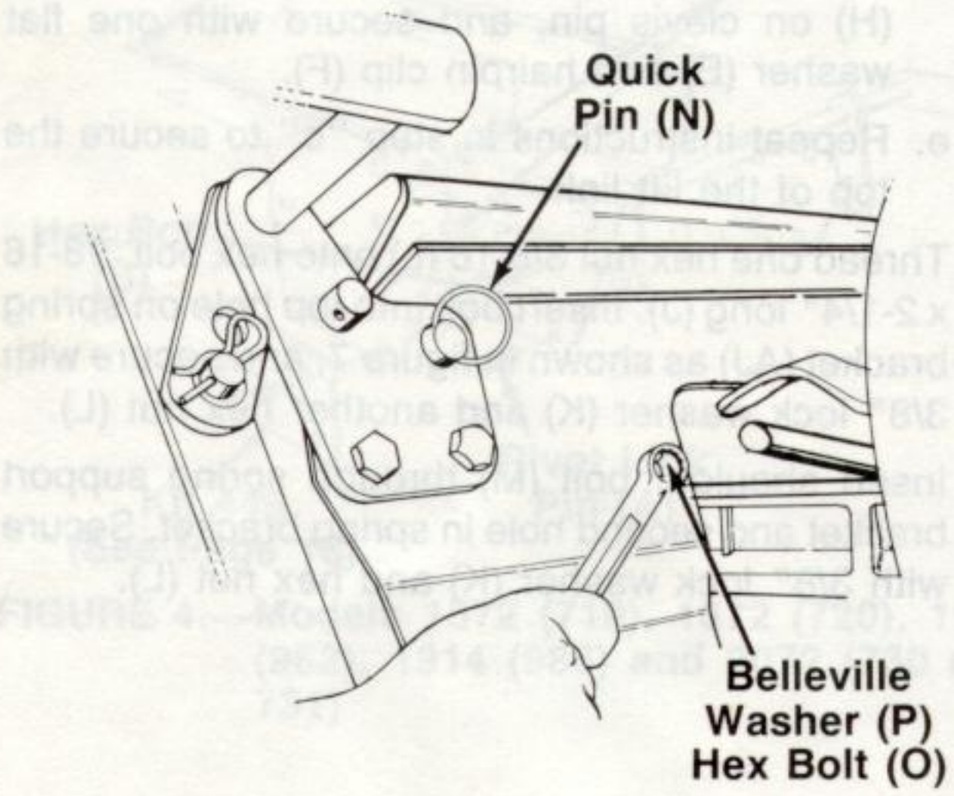


FIGURE 10.

9. Straighten belt, and attach to PTO pulley on tractor. Refer to figure 13.

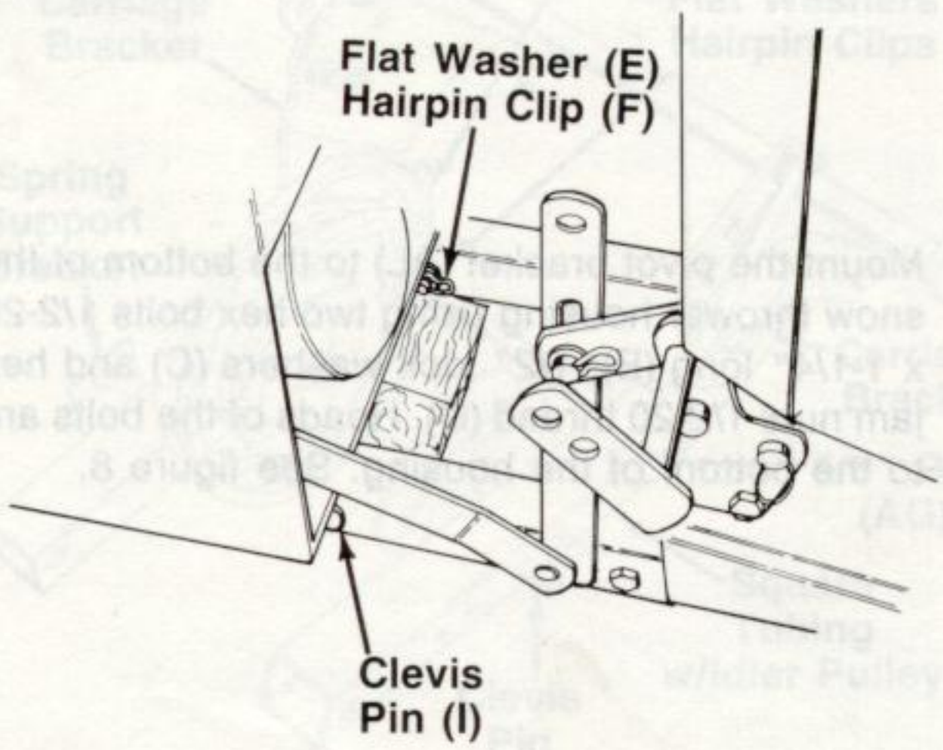


FIGURE 11.

10. Place snow thrower housing in position in front of tractor. Block up housing with a block of wood approximately 6″ high for ease of assembly.
11. Attach end of square tubings to pivot bracket underneath the snow thrower housing, using clevis pins (I), 5/8″ flat washers (E) and hairpin clips (F). See figure 11.

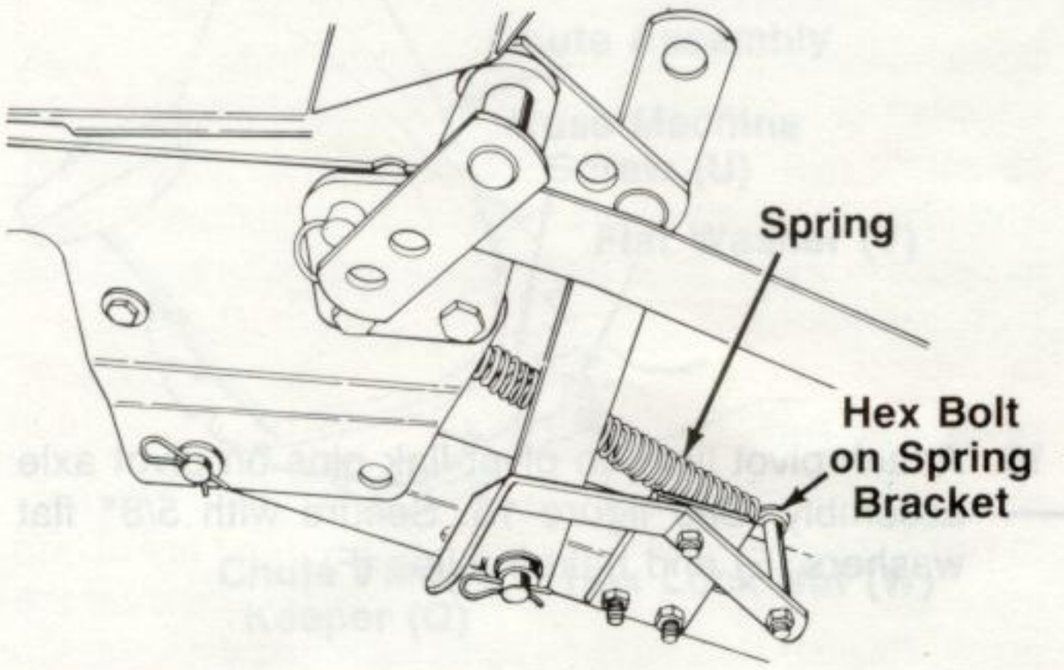


FIGURE 12.

12. Thread one hex lock nut (T) onto weld bolt on idler bracket. Attach spring (AN) to weld bolt on idler bracket. Attach other end of spring to the hex bolt on spring bracket. See figure 12.

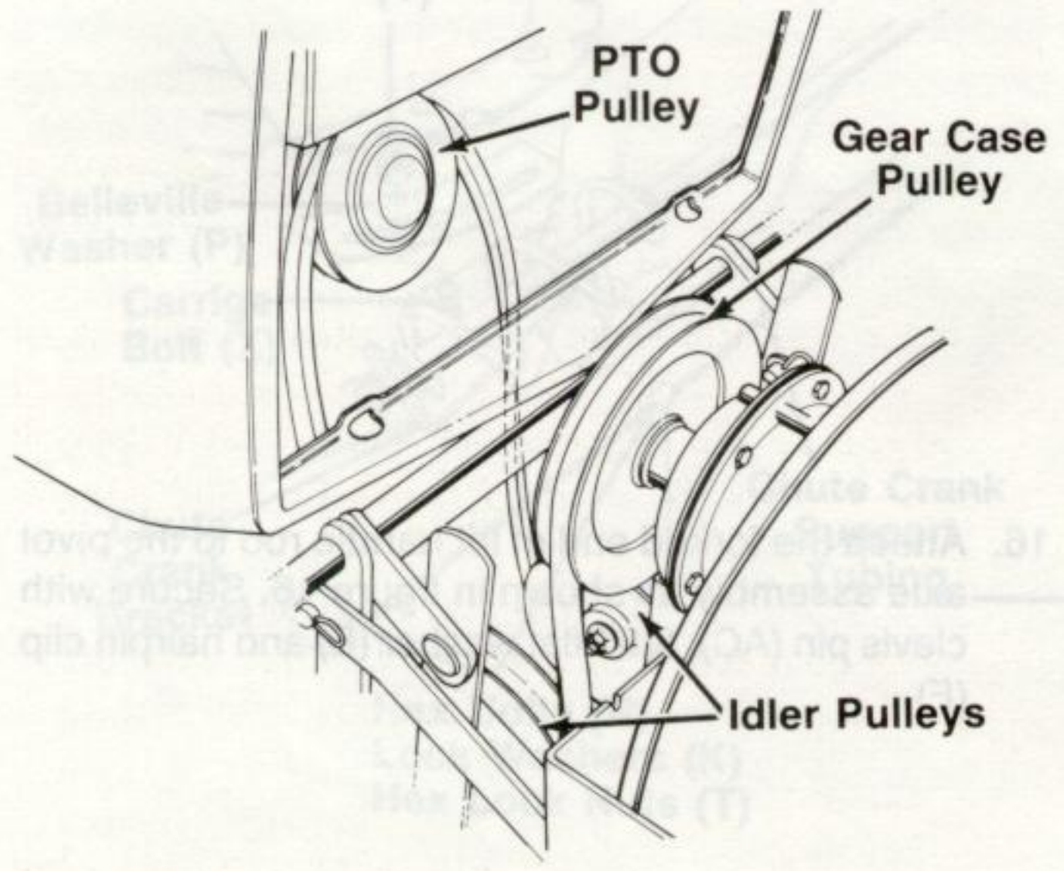


FIGURE 13.

13. Roll belt onto pulley attached to snow thrower gear case pulley. See figure 13.

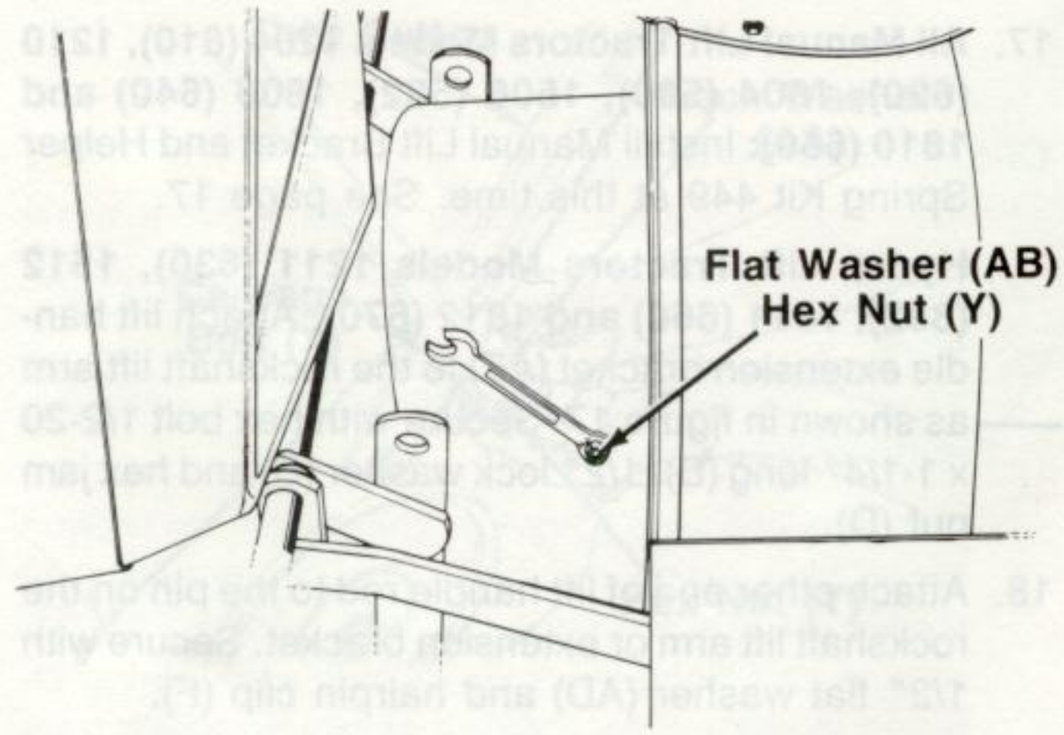


FIGURE 14.

14. Place one 5/16″ flat washer (AB) on bolt on each side of gear box. Place belt cover in position on bolts. Secure with 5/16″ flat washers (AB) and hex nuts (Y). See figure 14.

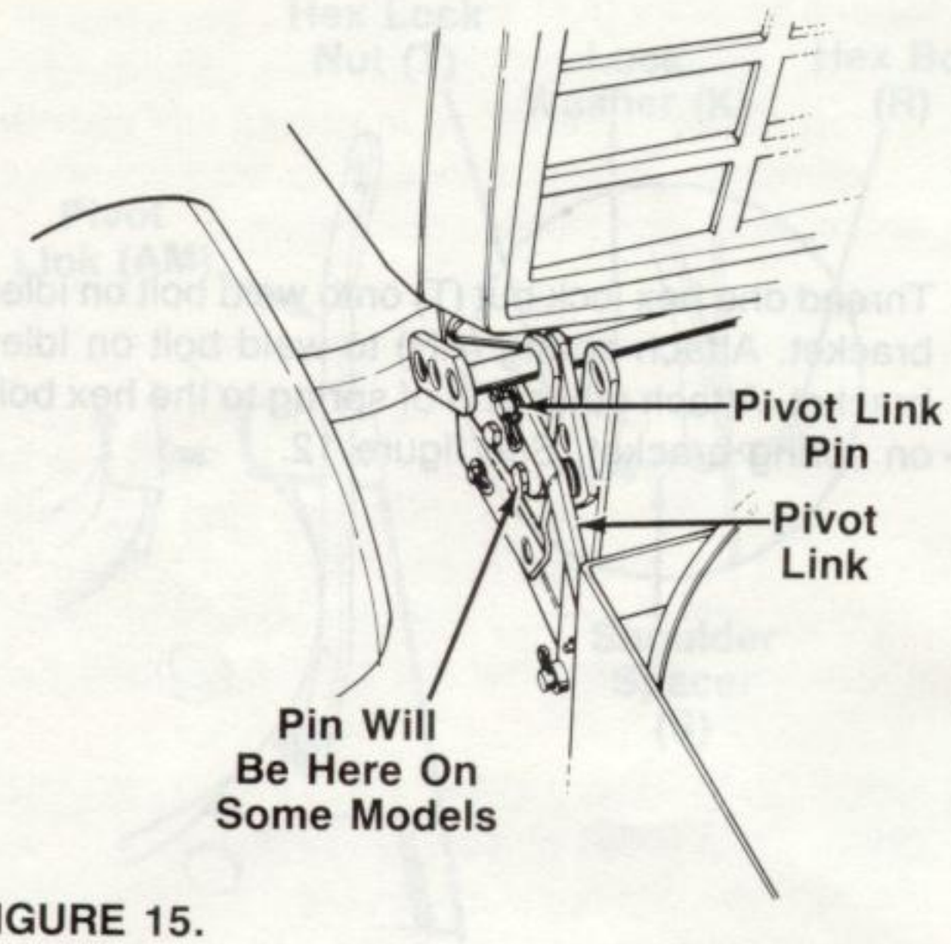


FIGURE 15.

15. Attach pivot links to pivot link pins on pivot axle assembly. See figure 15. Secure with 5/8″ flat washers (E) and hairpin clips (F).

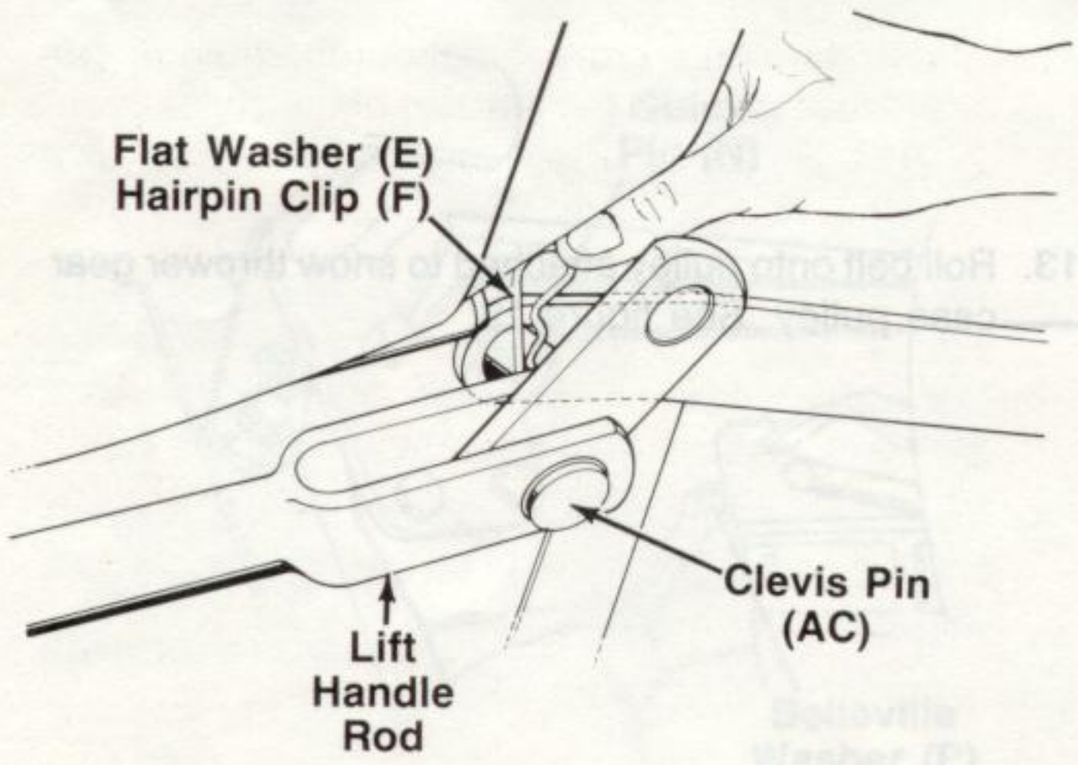


FIGURE 16.

16. Attach the forked end of lift handle rod to the pivot axle assembly as shown in figure 16. Secure with clevis pin (AC), 5/8″ flat washer (E) and hairpin clip (F).

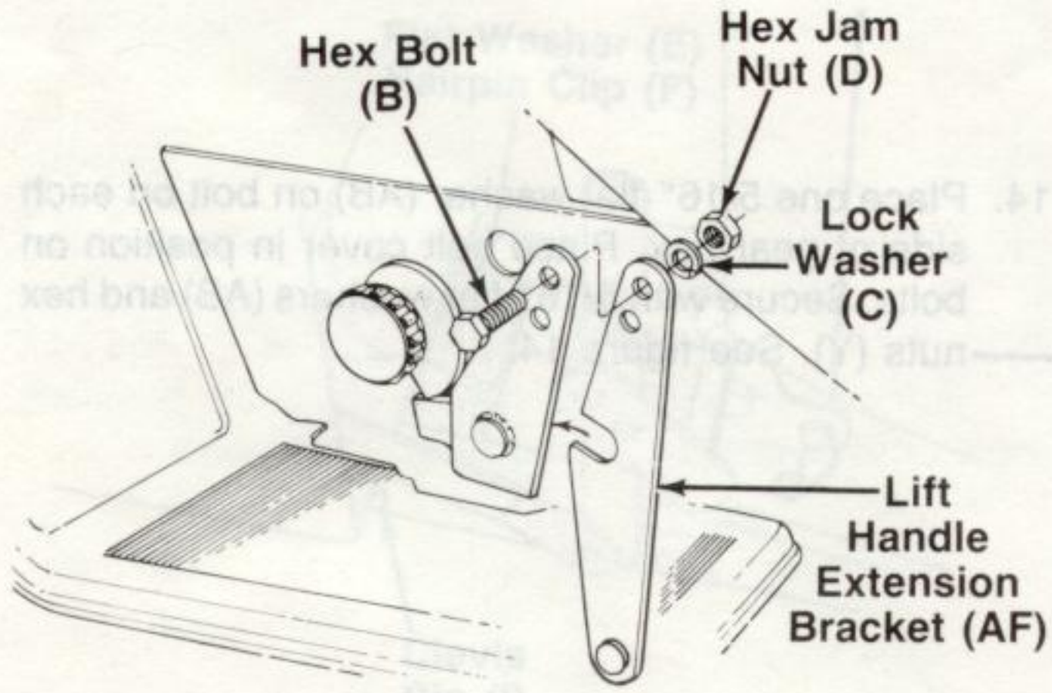


FIGURE 17.

17. **All Manual Lift Tractors Models 1204 (610), 1210 (620), 1604 (580), 1606 (582), 1806 (640) and 1810 (650):** Install Manual Lift Bracket and Helper Spring Kit 449 at this time. See page 17.

Hydro Lift Tractors Models 1211 (630), 1512 (882), 1811 (660) and 1812 (670): Attach lift handle extension bracket (AF) to the rockshaft lift arm as shown in figure 17. Secure with hex bolt 1/2-20 x 1-1/4″ long (B), 1/2″ lock washer (C) and hex jam nut (D).

18. Attach other end of lift handle rod to the pin on the rockshaft lift arm or extension bracket. Secure with 1/2″ flat washer (AD) and hairpin clip (F).

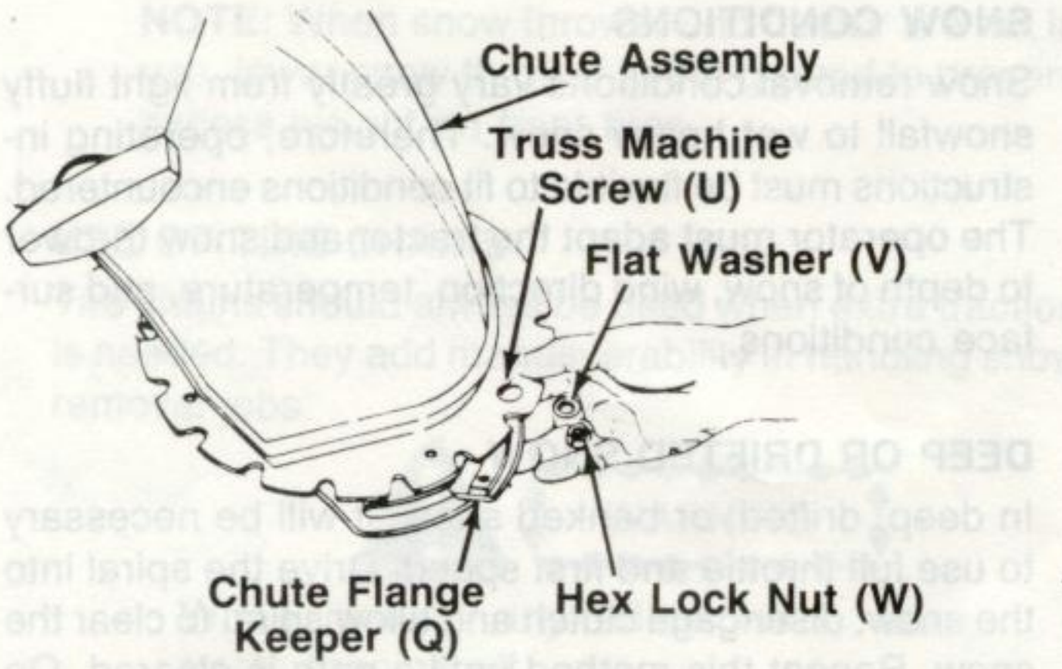


FIGURE 18.

19. Grease the chute opening on the snow thrower, using a multi-purpose automotive grease or equivalent.
20. Place the chute assembly over chute opening, with the opening in the chute assembly facing the front of the unit. Place chute flange keepers (Q) beneath lip of chute assembly. Secure with truss machine screws 3/4″ long (U), 1/4″ flat washers (V) and hex lock nuts (W) as shown in figure 18. Tighten with a screwdriver and a 7/16″ wrench, then back off 1/4 turn to allow easier movement.

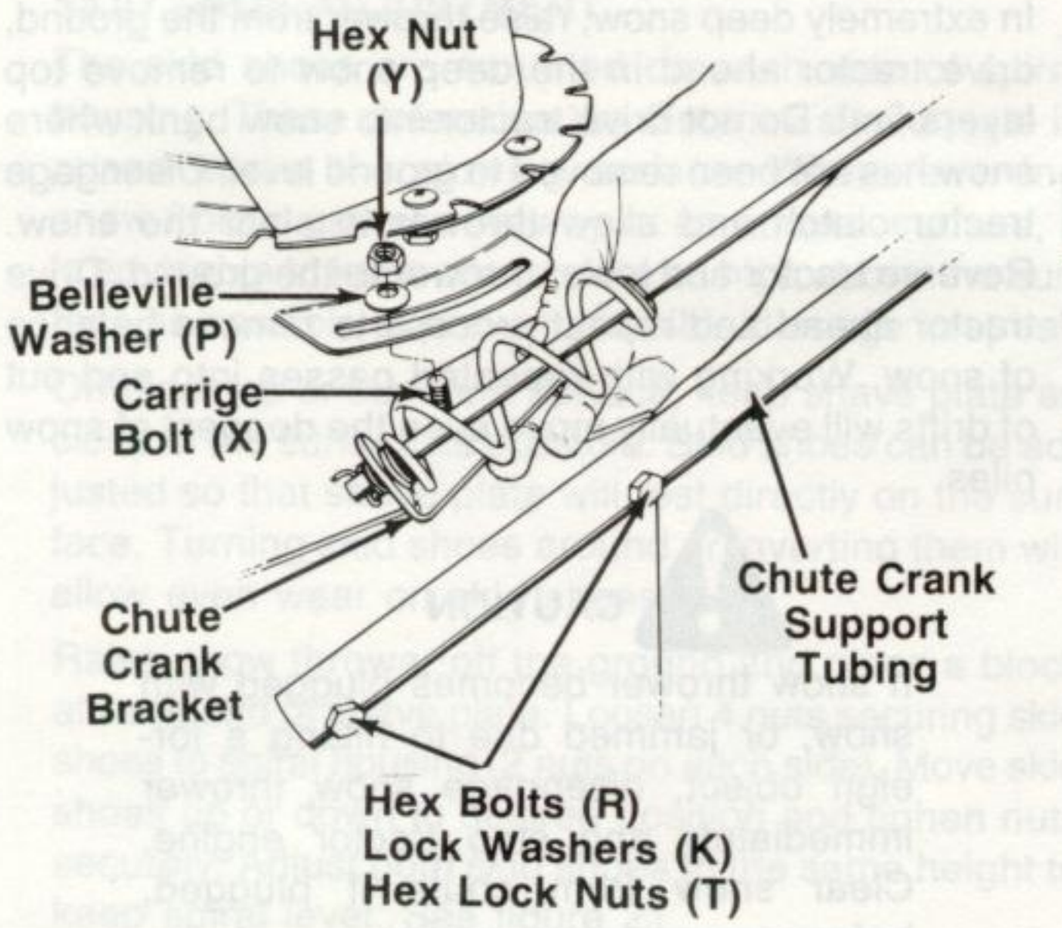


FIGURE 19.

21. Attach the chute crank support tubing to the snow thrower housing using hex bolts 3/8-24 x 1-1/4″ long (R), 3/8″ lock washers (K) and hex lock nuts (T). See figure 19.
22. Attach the chute crank bracket (on chute crank) to the extension on the left side of the chute opening (bracket goes beneath the extension) as shown in figure 19. Secure with carriage bolts 3/4″ long (X), 5/16″ belleville washers (P) and hex nuts (Y). Do not tighten.
23. Adjust the chute bracket so the spiral on the chute crank fully engages the teeth on the chute assembly. Tighten the nuts on the chute bracket securely.

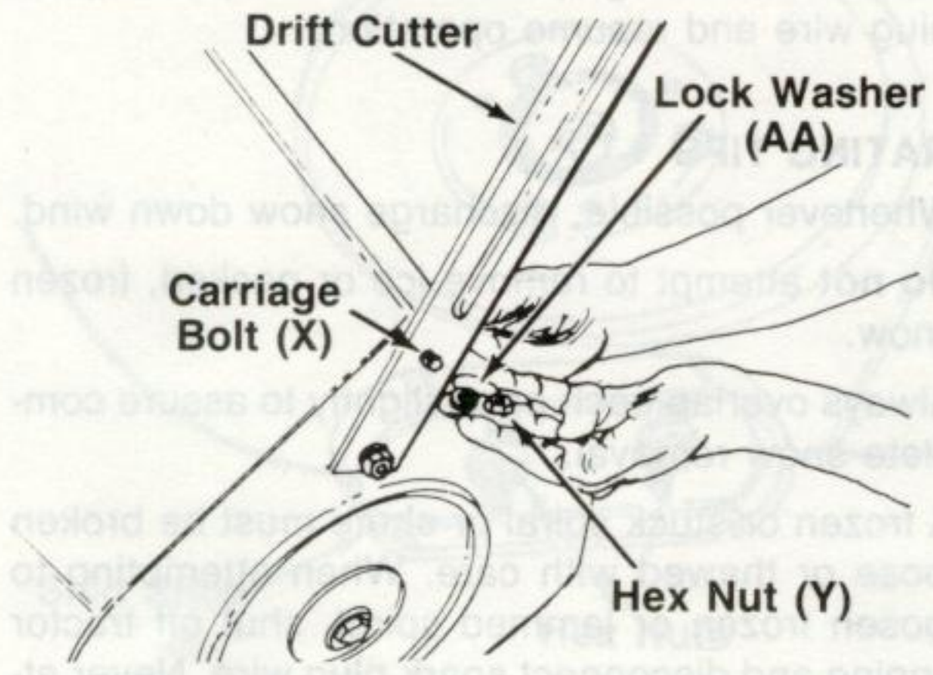


FIGURE 20.

24. Using a 1/2″ wrench, remove the carrige bolts, lock washers and hex nuts holding the drift cutters to the snow thrower housing. Turn and place the drift cutters in position. Secure with hardware just removed and carriage bolts 3/4″ long (X) (heads of the bolts are to the inside of the housing), 5/16″ lock washers (AA) and hex nuts (Y). See figure 20.
25. Tighten the belt tension by moving the spring bracket to the position shown in figure 12.
26. The snow thrower should be approximately 4″ off the ground when in the raised position. To adjust the height of the snow thrower, raise the snow thrower and block it 4 inches off the ground. Disconnect the lift handle rod from the rockshaft lift arm or extension bracket by removing the hairpin clip and flat washer. Thread the rod in or out as necessary until the hole in the rod lines up with the pin. Secure with flat washer and hairpin clip.

CONTROLS

The thrower controls are conveniently located at the operator's position on the tractor.

LIFT LEVER

The lift lever on the tractor is used to raise and lower snow thrower. To raise snow thrower, pull back on lift lever. To lower snow thrower, push lift lever forward slowly until snow thrower reaches ground level.

DISCHARGE CHUTE CONTROL CRANK

The discharge chute control crank is located on the left hand side of the snow thrower. The chute crank controls the direction in which snow is thrown. The discharge radius is 180°. Turn crank to the right to direct snow to the right hand side. Turn to the left to direct snow to left hand side.

FRONT POWER TAKE-OFF (PTO)

The front power take-off switch or switches control the snow throwing action. Engage the spirals by moving the PTO toggle switch or switches to the ''Engaged'' position. Move the PTO switch or switches to the ''Disengaged'' position to stop the snow throwing action.

OPERATION

The snow thrower is capable of handling heavy snow conditions. Become fully familiar with all aspects of both the tractor and snow thrower prior to its usage. **Do Not** remove any guards or covers while operating tractor and thrower.

BEFORE PLACING SNOW THROWER INTO OPERATION

1. Check **all** nuts and bolts for correct tightness. Be sure that all parts are properly assembled.
2. Test **all** controls for smooth operation.
   A. Discharge chute control crank
   B. Lift lever
   C. PTO switch or switches
3. Check the tractor and thrower to make certain both are in good operating condition.
4. Fill gas tank out-of-doors. Avoid spilling gasoline over engine. **Do not** fill tank while engine is running. Wipe up any spilled gas.

OPERATING SPEED

The spiral speed is directly related to engine speed. For maximum snow removal and discharge, maintain high engine R.P.M. (full throttle). The tractor's forward speed is controlled by selecting one of the forward speeds. It is advisable to oeprate the tractor at a slow ground speed for safe and efficient snow removal.

SNOW CONDITIONS

Snow removal conditions vary greatly from light fluffy snowfall to wet heavy snow. Therefore, operating instructions must be flexible to fit conditions encountered. The operator must adapt the tractor and snow thrower to depth of snow, wind direction, temperature, and surface conditions.

DEEP OR DRIFTED SNOW

In deep, drifted, or banked snow, it will be necessary to use full throttle and first speed. Drive the spiral into the snow, disengage clutch and allow spiral to clear the snow. Repeat this method until a path is cleared. On the second pass, overlap the first enough to allow the spiral to handle the snow without repeated clutching and declutching of the tractor.

In extremely deep snow, raise thrower from the ground, drive tractor ahead in the deep snow to remove top layers first. Do not drive tractor into snow bank where snow has not been removed to ground level. Disengage tractor clutch and allow thrower to clear the snow. Reverse tractor and lower thrower to the ground. Drive tractor ahead and repeat process to remove balance of snow. Working with repeated passes into and out of drifts will eventually move even the deepest of snow piles.

CAUTION

If snow thrower becomes plugged with snow, or jammed due to hitting a foreign object, disengage snow thrower immediately and stop tractor engine. Clear snow from chute if plugged, before resuming operation.

NOTE: If spiral is jammed or bent from hitting a foreign object, stop tractor engine. Remove spark plug wire from spark plug and then remove foreign object from spiral. If spiral damage is noted, repair prior to continuing operation. Then replace spark plug wire and resume operation.

OPERATING TIPS

1. Whenever possible, discharge snow down wind.
2. **Do not** attempt to remove ice or packed, frozen snow.
3. Always overlap each pass slightly to assure complete snow removal.
4. A frozen or stuck spiral or chute must be broken loose or thawed with care. When attempting to loosen frozen or jammed spiral, shut off tractor engine and disconnect spark plug wire. Never attempt to clear snow thrower at any time with tractor engine running.

NOTE: When snow thrower and tractor are not in use, lower snow thrower to the ground to prevent excess weight on front tires.

USE OF TIRE CHAINS

Tire chains should always be used when extra traction is needed. They add manueverability in handling snow removal jobs.

WARNING

When making any adjustments, turn tractor engine off.

SKID SHOE ADJUSTMENT

The skid shoes are mounted on each side of spiral housing. These determine the distance shave plate is raised above the plowing surface. When removing snow from a gravel driveway or an uneven surface, it is advisable to keep shave plate as high above the surface as possible to prevent possible damage to spiral.

On blacktop or concrete surface, keep shave plate as close to the surface as possible. Skid shoes can be adjusted so that shave plate will rest directly on the surface. Turning skid shoes around or inverting them will allow even wear on skid shoes.

Raise snow thrower off the ground and place a block at each end of shave plate. Loosen 4 nuts securing skid shoes to spiral housing (2 nuts on each side). Move skid shoes up or down to desired position and tighen nuts securely. Adjust both skid shoes to the same height to keep spiral level. See figure 21.

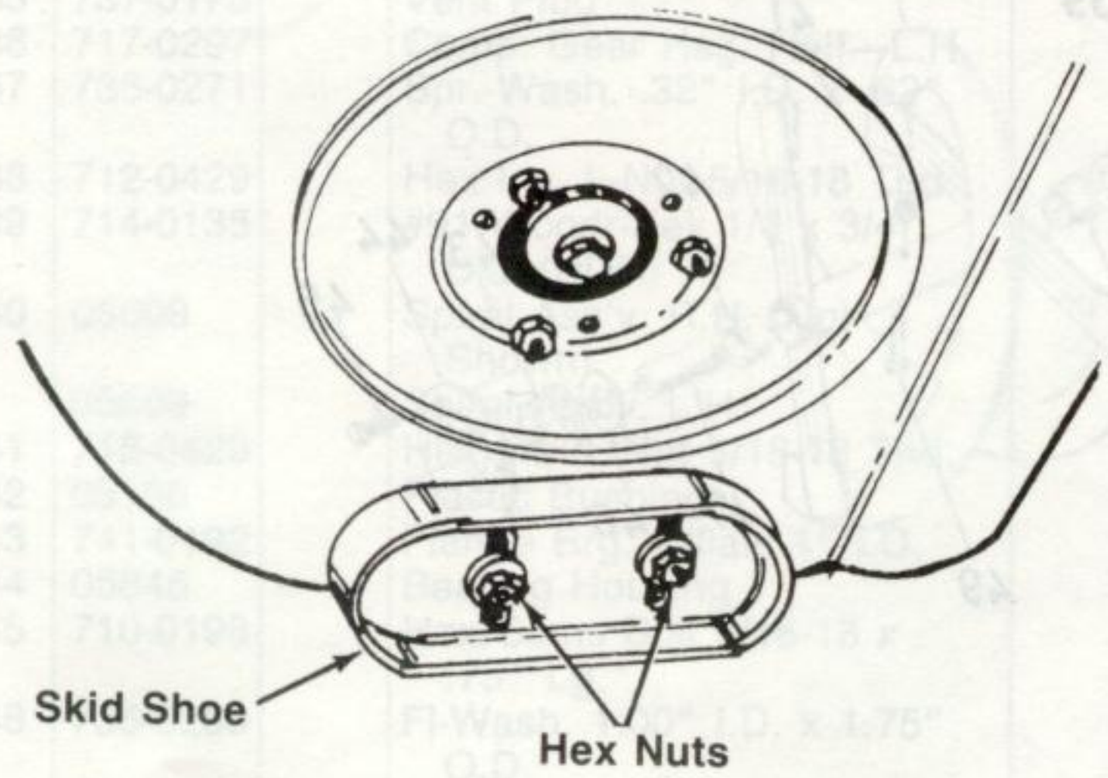


FIGURE 21.

CHUTE DEFLECTOR ADJUSTMENT

The upper chute deflector mounting on the top of the chute determines the distance snow is thrown. Moving top of deflector down decreases distance of throw and raising deflector increases distance of throw. Operator must get off tractor to make this adjustment. Disengage spirals and turn engine off before making this adjustment.

To adjust, loosen hand knob on the side of chute deflector and pivot to desired position. Retighten hand knob.

SNOW THROWER HEIGHT ADJUSTMENT

The snow thrower should be approximately 4″ off the ground when in the raised position. To adjust the height of the snow thrower, refer to step 26 of the Assembly Instructions.

MAINTENANCE

SHAVE PLATE AND SKID SHOES

The shave plate and skid shoes on the bottom of the snow thrower are subject to wear. They should be checked periodically and replaced when necessary. Skid shoes are reversible for longer life. They may also be inverted to extend their life even further.

Replace shave plate and skid shoes before wear is excessive. Failure to do so will result in damage to the spiral housing.

AUGERS

The augers are secured to spiral shaft with two hex bolts and hex lock nuts (See Ref. Nos. 41 and 49 on page 12). If you hit a foreign object or ice jam, the snow thrower is designed so that the hex bolts will shear.

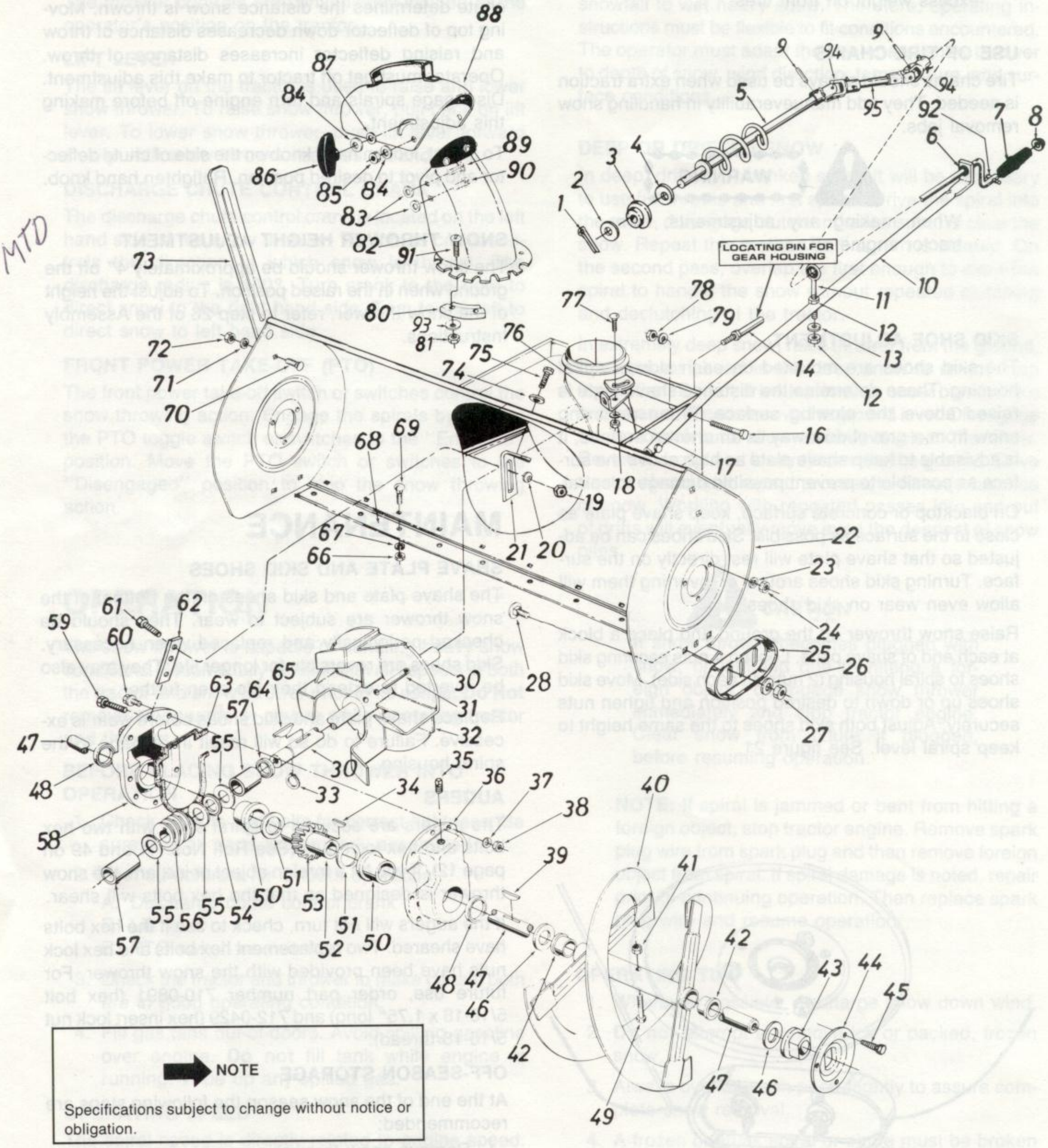
If the augers will not turn, check to see if the hex bolts have sheared. Two replacement hex bolts and hex lock nuts have been provided with the snow thrower. For future use, order part number 710-0891 (hex bolt 5/16-18 x 1.75″ long) and 712-0429 (hex insert lock nut 5/16-18 thread).

OFF-SEASON STORAGE

At the end of the snow season the following steps are recommended:

1. Remove snow thrower assembly from tractor.
2. Wash off any salt deposit which may have dried on the thrower and housing. Paint or cover exposed metal with a light coat of oil.
3. Store thrower in a dry place.

Model 450



MTD

NOTE

Specifications subject to change without notice or obligation.

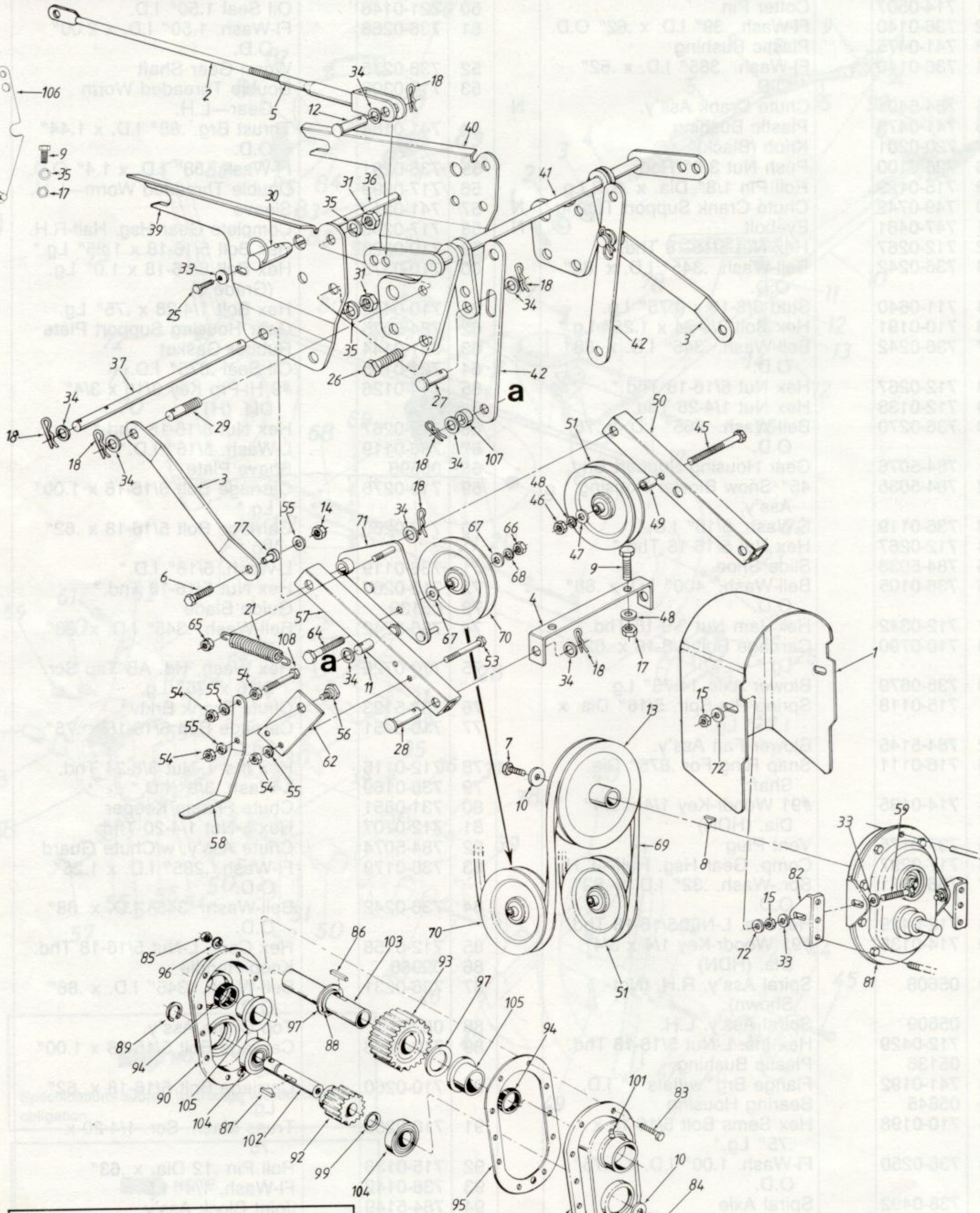
NOTE

Lubricate with 4 oz. Shell Alvania Grease EPR00. Order Part No. 737-0168.

PARTS LIST FOR MODEL 450 45″ SNOW THROWER

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	714-0507		Cotter Pin	
2	736-0140		Fl-Wash. .39″ I.D. x .62″ O.D.	
3	741-0475		Plastic Bushing	
4	736-0140		Fl-Wash. .385″ I.D. x .62″ O.D.	
5	784-5401		Chute Crank Ass'y.	N
6	741-0475		Plastic Bushing	
7	720-0201		Knob (Black)	
8	726-0100		Push Nut 3/8″ Rod	
9	715-0129		Roll Pin 1/8″ Dia. x .812 Lg.	
10	749-0742		Chute Crank Support Tubing	N
11	747-0481		Eyebolt	N
12	712-0267		Hex Nut 5/16-18 Thd.*	
13	736-0242		Bell-Wash. .345″ I.D. x .88″ O.D.	
14	711-0640		Stud 3/8-16 x 2.75″ Lg.	
16	710-0191		Hex Bolt 3/8-24 x 1.25″ Lg.*	
17	736-0242		Bell-Wash. .345″ I.D. x .88″ O.D.	
18	712-0267		Hex Nut 5/16-18 Thd.*	
19	712-0138		Hex Nut 1/4-28 Thd.	
20	736-0270		Bell-Wash. .265″ I.D. x .75″ O.D.	
21	784-5076		Gear Housing Support Brkt.	
22	784-5036		45″ Snow Blower Housing Ass'y.	
23	736-0119		L-Wash. 5/16″ I.D.*	
24	712-0267		Hex Nut 5/16-18 Thd.*	
25	784-5038		Slide Shoe	
26	736-0105		Bell-Wash. .400″ I.D. x .88″ O.D.	
27	712-0342		Hex Jam Nut 3/8-16 Thd.	
28	710-0790		Carriage Bolt 3/8-16 x .62″ Lg.*	
30	738-0679		Blower Axle 14.75″ Lg.	
31	715-0118		Spring Pin Spir. 5/16″ Dia. x 1.75″ Lg.	
32	784-5145		Blower Fan Ass'y.	
33	716-0111		Snap Ring For .875″ Dia. Shaft	
34	714-0135		#91 Woodr-Key 1/4 x 3/4″ Dia. (HDN)	
35	737-0175		Vent Plug	
36	717-0297		Comp. Gear Hsg. Half—L.H.	
37	736-0271		Spr.-Wash. .32″ I.D. x .62″ O.D.	
38	712-0429		Hex Ins. L-Nut 5/16-18 Thd.	
39	714-0135		#91 Woodr-Key 1/4 x 3/4″ Dia. (HDN)	
40	05608		Spiral Ass'y. R.H. (Not Shown)	
	05609		Spiral Ass'y. L.H.	
41	712-0429		Hex Ins. L-Nut 5/16-18 Thd.	
42	05136		Plastic Bushing	
43	741-0192		Flange Brg. w/flats 1″ I.D.	
44	05845		Bearing Housing	
45	710-0198		Hex Sems Bolt 5/16-18 x .75″ Lg.*	
46	736-0250		Fl-Wash. 1.00″ I.D. x 1.75″ O.D.	
47	738-0492		Spiral Axle	
48	741-0182		Flange Bearing 1.503″ I.D.	
49	710-0891		Shear Bolt 5/16-18 x 1.75″ Lg.	
50	721-0146		Oil Seal 1.50″ I.D.	
51	736-0266		Fl-Wash. 1.50″ I.D. x 2.00″ O.D.	
52	738-0275		Worm Gear Shaft	
53	717-0300		Double Threaded Worm Gear—L.H.	
54	741-0184		Thrust Brg. .88″ I.D. x 1.44″ O.D.	
55	736-0291		Fl-Wash. .88″ I.D. x 1.4″ O.D.	
56	717-0299		Double Threaded Worm—L.H.	
57	741-0217		Sleeve	
58	717-0298		Complete Gear Hsg. Half-R.H.	
59	710-0528		Hex Bolt 5/16-18 x 1.25″ Lg.*	
60	710-0376		Hex Bolt 5/16-18 x 1.0″ Lg. (Grade 5)	
61	710-0412		Hex Bolt 1/4-28 x .75″ Lg.	
62	784-5075		Gear Housing Support Plate	
63	721-0144		Rubber Gasket	
64	721-0145		Oil Seal .875″ I.D.	
65	714-0126		#9 Hi-Pro Key 3/16 x 3/4″ Dia. (HT)	
66	712-0267		Hex Nut 5/16-18 Thd.*	
67	736-0119		L-Wash. 5/16″ I.D.*	
68	05598		Shave Plate	
69	710-0276		Carriage Bolt 5/16-18 x 1.00″ Lg.*	
70	710-0260		Carriage Bolt 5/16-18 x .62″ Lg.*	
71	736-0119		L-Wash. 5/16″ I.D.*	
72	712-0267		Hex Nut 5/16-18 Thd.*	
73	05139		Guide Blade	
74	736-0242		Bell-Wash. .345″ I.D. x .88″ O.D.	
75	710-0726		Hex Wash. Hd. AB Tap Scr. 5/16 x .75″ Lg.	
76	784-5123		Chute Crank Brkt.	
77	710-0451		Carriage Bolt 5/16-18 x .75″ Lg.*	
78	712-0116		Hex Ins. L-Nut 3/8-24 Thd.	
79	736-0169		L-Wash. 3/8″ I.D.*	
80	731-0851		Chute Flange Keeper	N
81	712-0107		Hex L-Nut 1/4-20 Thd.	
82	784-5074		Chute Ass'y. w/Chute Guard	
83	736-0179		Fl-Wash. .285″ I.D. x 1.25″ O.D.	
84	736-0242		Bell-Wash. .345″ I.D. x .88″ O.D.	
85	712-0158		Hex Cent. L-Nut 5/16-18 Thd.	
86	09966		Knob Handle	
87	736-0231		Bell-Wash. .345″ I.D. x .88″ O.D.	
88	05225		Top Chute Ass'y.	
89	710-0276		Carriage Bolt 5/16-18 x 1.00″ Lg.*	
90	710-0260		Carriage Bolt 5/16-18 x .62″ Lg.*	
91	710-0255		Truss Mach. Scr. 1/4-20 x .75″	
92	715-0138		Roll Pin .12 Dia. x .63″	
93	736-0142		Fl-Wash. 1/4″ I.D.	
94	784-5149		Joint Block Ass'y.	
95	747-0523		Chute Crank Ext. 3/8″ x 6.0″ Lg.	

Model 450



Lubricate with 8 oz. of plastilube grease.
Order Part No. 737-0133.

Model 450

PARTS LIST FOR MODEL 450 45″ SNOW THROWER ATTACHMENT

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	731-0870		Belt Cover	N
2	747-0546		Lift Handle Rod	N
3	784-5413		Pivot Link	N
4	784-5414		Pivot Bracket	N
5	10991		Adj. Clevis Ass'y.	
6	710-0191		Hex Bolt 3/8-24 x 1.25″ Lg.	
7	710-0591		Hex L-Bolt 3/8-24 x 1.0″ Lg.	
8	714-0154		Woodruff Key	
9	710-0504		Hex Bolt ½-20 x 1.25″ Lg.*	
10	736-0247		Bell-Wash. .40″ I.D. x 1.25″ Lg.	
11	711-0577		Clevis Pin	
12	711-0654		Clevis Pin	
13	756-0506		3/4 ''V''-Pulley—7″ O.D.	
14	712-0116		Hex L-Nut 3/8-24 Thd.	
15	712-0267		Hex Nut 5/16-18 Thd.*	
17	712-0922		Hex Jam Nut ½-20 Thd.	
18	714-0147	S	Hitch Pin	
21	732-0262		Ext. Spring	
25	710-0117		Hex Bolt 5/16-24 x 1″ Lg.	
26	710-0504		Hex Bolt ½-20 x 1.25″ Lg.*	
27	711-0309		Clevis Pin	
28	711-0577		Clevis Pin	
29	711-0798		Pivot Link Pin ½″-20 x 1.75″ Lg.	N
30	711-0799	S	Quick Pin—2.12″ Lg.	N
31	712-0922		Hex Jam Nut ½-20 Thd.	
33	736-0242		Bell-Wash. .345″ I.D. x .88″ O.D.	
34	736-0290		Fl-Wash. 5/8″ I.D. x 1.0″ O.D.	
35	736-0921		L-Wash. ½″ I.D.*	
36	747-0543		Carriage Brkt. Support Rod	N
37	747-0544		Rod 12.5″ Lg.	N
39	784-5402		Carriage Brkt. R.H.	
40	784-5403		Carriage Brkt. L.H.	N
41	784-5404		Pivot Axle Ass'y.	N
42	784-5412		Lift Link 13.5″ Lg.	
45	710-0465		Hex Bolt ½-20 x 4.50″ Lg.	
46	712-0206		Hex Nut ½-13 Thd.*	
47	736-0326		Fl-Wash. .510″ I.D. x 1.0″ O.D.	
48	736-0921		L-Wash. ½″ I.D.*	
49	748-0192		Spacer .635″ I.D. x .890″ O.D.	
50	750-0701		Square Tubing 2.0″ x 15.5″ Lg.	N
51	756-0507		Idler Pulley 6″ O.D.	N
53	710-0521		Hex Bolt 3/8-16 x 3.0″ Lg.	
54	712-0798		Hex Nut 3/8-16 Thd.*	
55	736-0169		L-Wash. 3/8″ I.D.*	
56	738-0322		Shld. Bolt .625″ Dia. x .217″	
57	750-0701		Square Tubing 2.0″ x 15.5″ Lg.	N
58	784-5410		Spring Bracket	N
59	710-0528		Hex Bolt 5/16-18 x .75″ Lg.*	
62	784-5411		Spring Bracket Support	N
64	710-0489		Hex Bolt ½-13 x 2.0″ Lg.	
65	712-0116		Hex L-Nut 3/8-24 Thd.	
66	712-0206		Hex Nut ½-13 Thd.*	
67	736-0326		Fl-Wash. .510″ I.D. x 1.0″ O.D.	
68	736-0921		L-Wash. ½″ I.D.*	
69	754-0340	N	V-Belt	N
70	756-0507		Idler Pulley 6.0″ O.D.	N
71	784-5408		Idler Bracket Ass'y.	N
72	736-0159		Fl-Wash. .344″ I.D. x .875″ O.D.	
77	748-0241	N	Shld. Spacer .380″ I.D.	
81	717-0869		Gear Box Ass'y.	
82	05607		Gear Box Support Brkt.	
83	710-0281		Hex Bolt ¼-28 x .88″ Lg.	
84	710-0591		Hex L-Bolt 3/8-24 x 1.0″ Lg.	
85	712-0138		Hex Nut ¼-28 Thd.	
86	714-0113		Hi-Pro Key	
87	714-0135		#91 Woodruff Key	
88	716-0116		Snap Ring for 1.25″ Dia. Shaft	
89	716-0118		Snap Ring	
90	717-0359		Comp. Gear Hsg. Half—L.H.	
91	717-0360		Comp. Gear Hsg. Half—R.H.	
92	717-0361		15 Teeth Spur Gear	
93	717-0362		28 Teeth Spur Gear	
94	721-0117		Oil Seal 1.25″ I.D. x 1.75″ O.D.	
95	721-0158		Gasket	
96	736-0175		Spr.-Wash. .27″ I.D. x .57″ O.D.	
97	736-0246		Fl-Wash. 1.25″ I.D. x 2.0″ O.D.	N
99	736-0259		Fl-Wash. 1.0″ I.D. x 1.62″ O.D.	
100	737-0120		Grease	
101	737-0146		Grease Fitting	
102	738-0361		Input Shaft	
103	738-0677		Gear Shaft 6″ Lg.	N
104	741-0131		Ball Brg. 1.0″ I.D. x 2.0″ O.D.	
105	748-0194		Flange Brg. 1.252″ I.D.	
106	794-5415		Lift Handle Ext. Brkt.	
107	748-0273		Spacer 5/8″ I.D. x .33″ Lg.	
108	710-0756		Hex Bolt 3/8-16 x 2.25″ Lg.	

*For faster service order standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

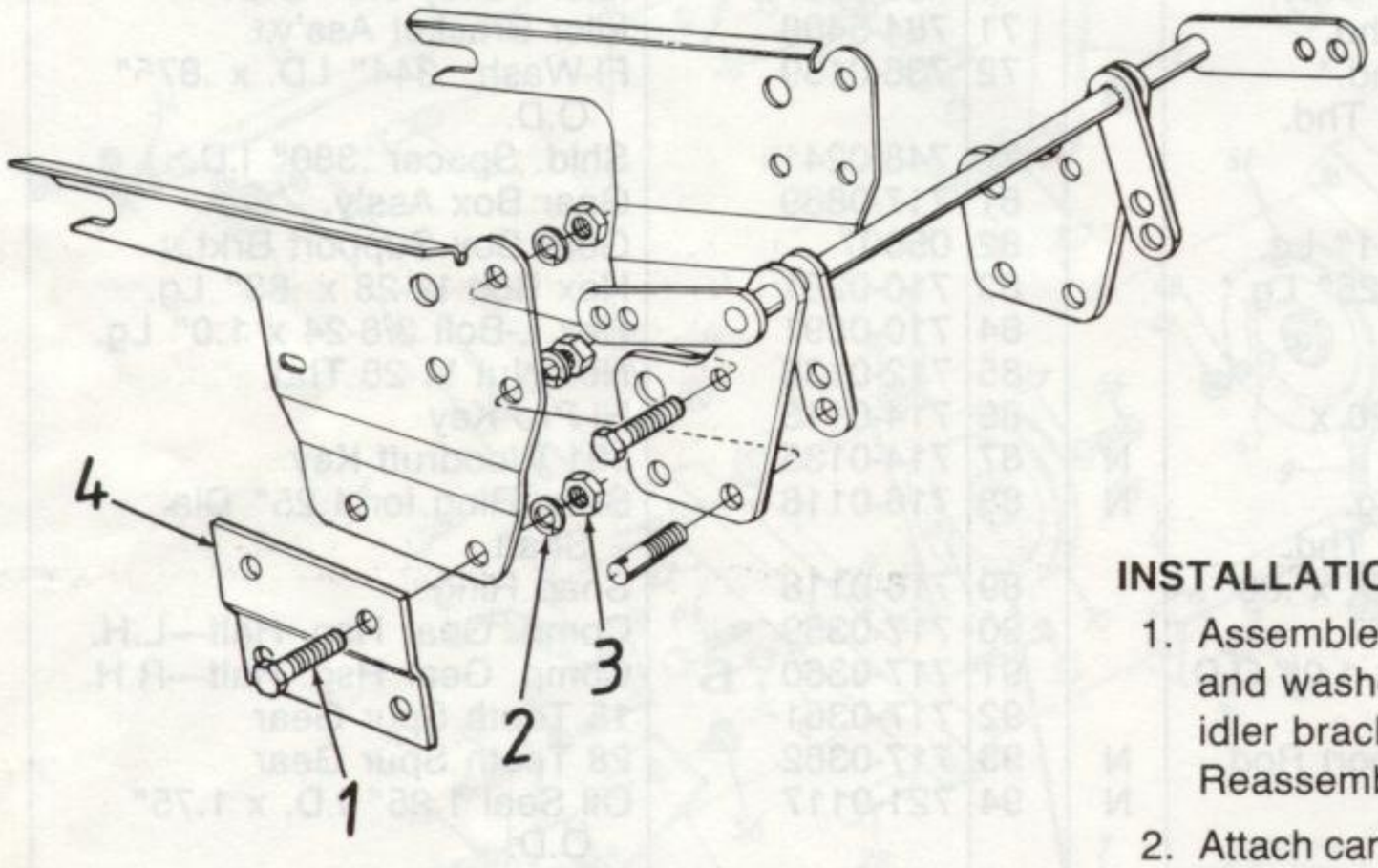
Model 448

FOR 1572 (710), 1872 (720), 1912 (982), 1914 (986) and 2072 (730 and 731) TRACTORS

CARRIAGE BRACKET EXTENSION KIT

PARTS IN KIT

REF. NO.	PART NO.	DESCRIPTION	QTY.
1	710-0312	Hex Bolt 5/8-18 x 1.31″ Lg.	2
2	712-0318	Hex Jam Nut 5/8-18 Thd.	2
3	736-0158	L-Wash. 5/8″ I.D.	2
4	784-5407	Carriage Bracket Extension	2
5	756-0341	V-Belt 89″ Lg. (Not Shown)	1

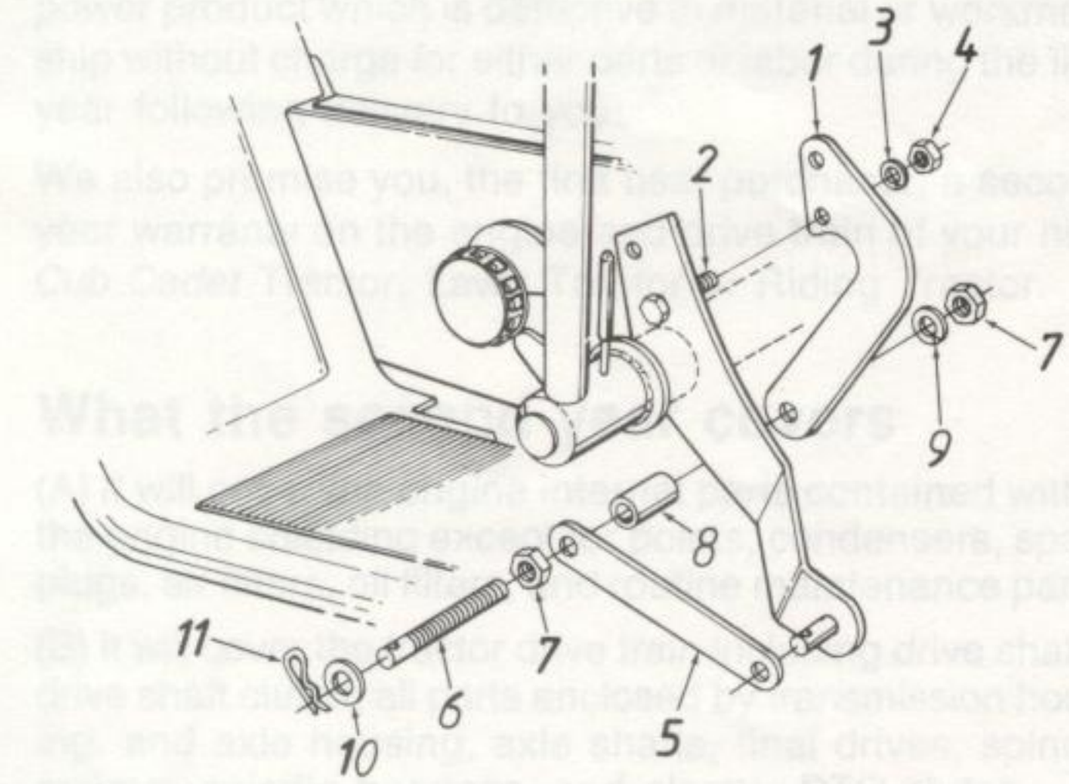


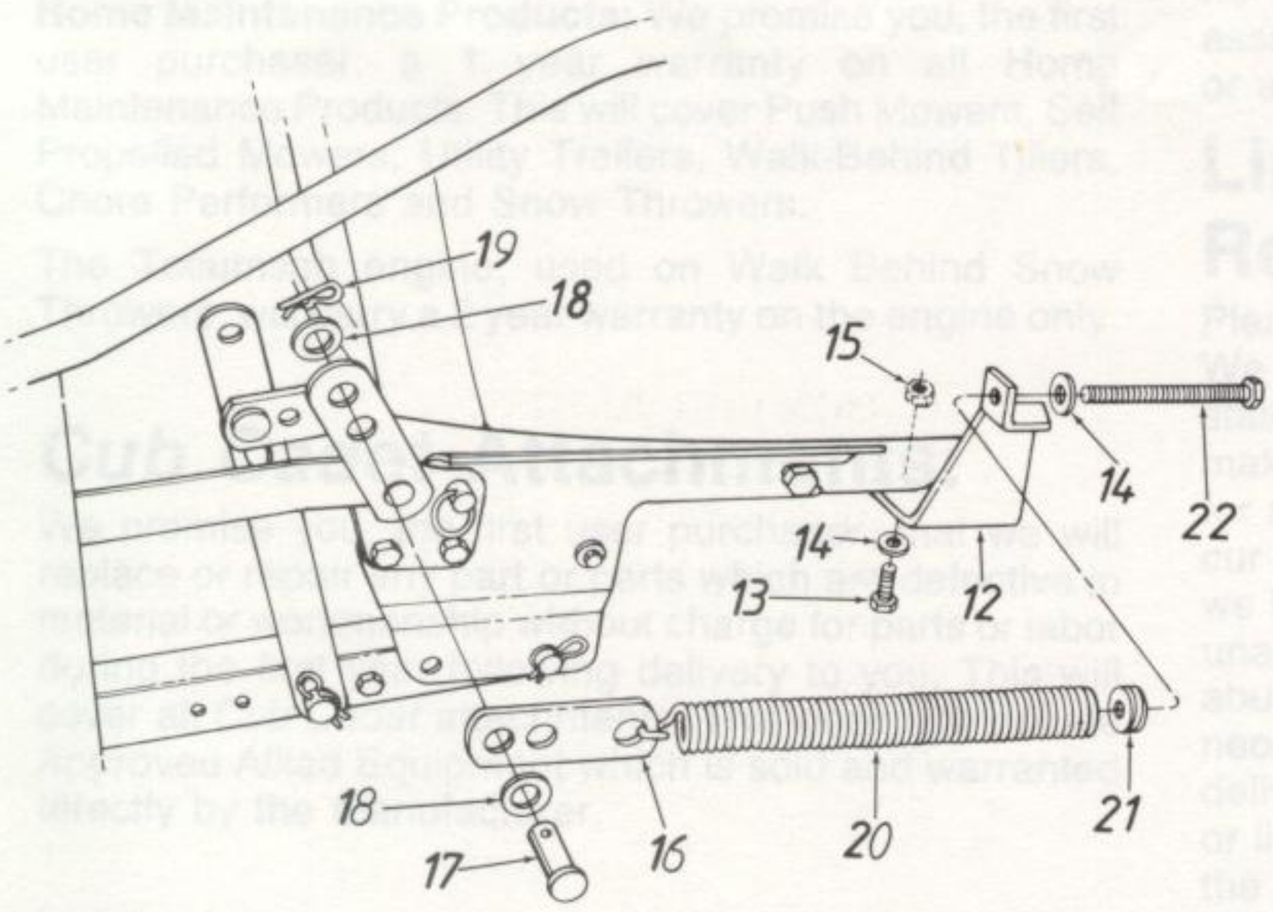
INSTALLATION INSTRUCTIONS

1. Assemble the new belt by removing the hex nut and washers which secure the idler pulley to the idler bracket. Slide pulley off and remove V-belt. Reassemble using longer belt provided in this kit.
2. Attach carriage bracket extensions (Ref. 4) with the bend toward the inside as shown, using hex bolts 5/8-18 (Ref. 1), 5/8″ lock washers (Ref. 3) and hex jam nuts (Ref. 2).
3. Continue assembly of snow thrower, following step 2 on page 4.

Model 449

FOR ALL MANUAL LIFT TRACTORS





MANUAL LIFT BRACKET AND HELPER SPRING KIT

PARTS IN KIT

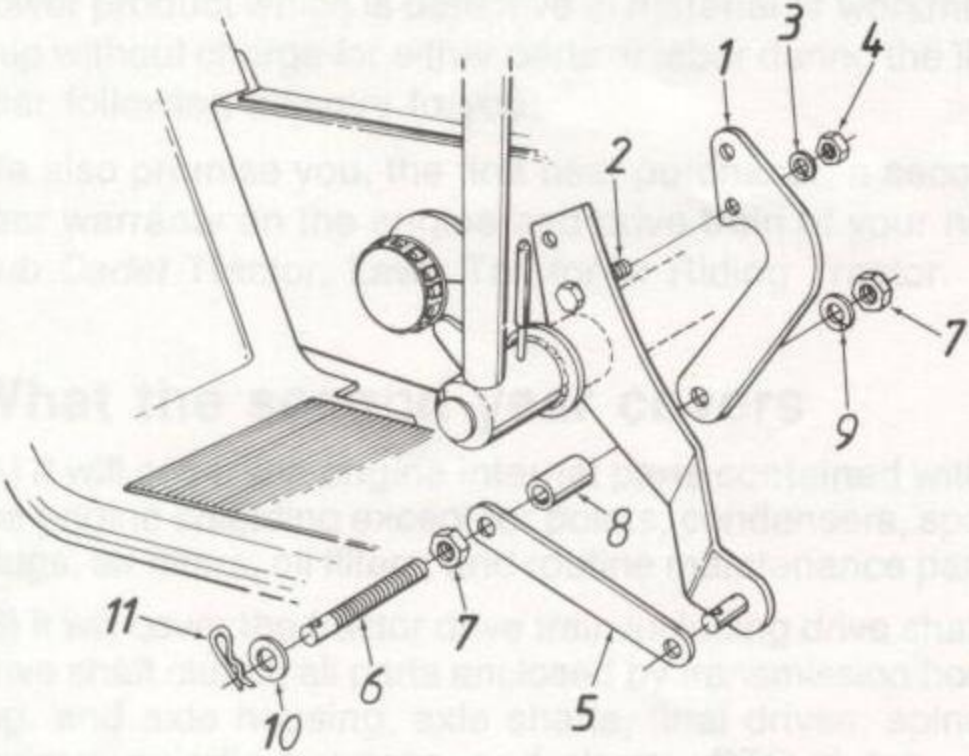
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	784-5417	Lift Arm Extension Bracket	1
2	710-0514	Hex Bolt 3/6-16 x 1″ Lg.—Grade 5	2
3	736-0169	L-Wash. 3/8″ I.D.*	2
4	712-0798	Hex Nut 3/8-16 Thd.*	2
5	10318	Link—3/16″ x 1″ x 4.75″*	1
6	711-0804	Lift Handle Pin	1
7	712-0922	Hex Jam Nut 1/2-20 Thd.	2
8	750-0382	Spacer .48″ I.D. x .75″ O.D. x 1″	1
9	736-0921	L-Wash. 1/2″ I.D.*	1
10	736-0272	Fl-Wash. .51″ I.D. x 1″ O.D.	1
11	714-0101	Hairpin Clip	1
12	784-5400	Helper Spring Bracket	1
13	710-0253	Hex Bolt 3/8-16 x 1″ Lg.	2
14	736-0105	Bell-Wash. 3/8″ I.D.	3
15	712-0798	Hex Nut 3/8-16 Thread	2
16	784-5405	Link .32″ x 1.5″ x 4.5″	1
17	711-0309	Clevis Pin	1
18	736-0290	Fl-Wash. 5/8″ I.D.	2
19	714-0147	Hairpin Clip	1
20	732-0557	Extension Spring	1
21	711-0635	Spring Insert	1
22	710-0677	Hex Bolt Ass'y.	1

INSTALLATION INSTRUCTIONS
(Refer to Illustrations Above)

1. Attach lift arm extension bracket (Ref. 1) to the rockshaft lift arm using two hex bolts 3/8-16 x 1″ long (Ref. 2), 3/8″ lock washers (Ref. 3) and hex nuts (Ref. 4).
2. Thread one hex jam nut 1/2-20 thread (Ref. 7) all the way on lift handle pin (Ref. 6).
3. Place one end of link 4-3/4″ long (Ref. 5) over weld pin on rockshaft lift arm. Insert threaded end of lift handle pin (with hex jam nut attached) through other end of link, then through spacer (Ref. 8) and lift arm extension bracket. Secure with 1/2″ lock washer (Ref. 9) and hex jam nut (Ref. 7).
4. Attach the helper spring bracket (Ref. 12) to left side of tractor frame using two hex bolts (Ref. 13), belleville washers (Ref. 14) (cupped side against the frame) and hex nuts 3/8-16 thread (Ref. 15).
5. Place one 5/8″ flat washer (Ref. 18) on clevis pin (Ref. 17). Insert clevis pin through link (Ref. 16) and through top hole in bracket on pivot arm axle assembly. Secure with 5/8″ flat washer and hair-pin clip (Ref. 19).
6. Hook end of spring into link as shown. Place belleville washer (Ref. 14) onto hex bolt assembly (Ref. 22), with the crowned side of washer against the head of the bolt.
7. Insert hex bolt assembly through hole in helper spring bracket (Ref. 12). Thread bolt into the in-sert in the end of the spring, until the belleville washer compresses.
8. Continue with step 18 of the Assembly Instructions.

Model 449

FOR ALL MANUAL LIFT TRACTORS



Cub Cadet Corporation's Promise To You

We promise you, the first user purchaser, that we will replace or repair any part or parts of your new outdoor power product which is defective in material or workmanship without charge for either parts or labor during the first year following delivery to you.

We also promise you, the first user purchaser, a second year warranty on the engine and drive train of your new *Cub Cadet* Tractor, Lawn Tractor or Riding Tractor.

What the second year covers

(A) It will cover the engine internal parts contained within the engine shielding except for points, condensers, spark plugs, air filters, oil filters, and routine maintenance parts.

(B) It will cover the tractor drive train including drive shafts, drive shaft clutch, all parts enclosed by transmission housing, and axle housing, axle shafts, final drives, spindle pulleys, spindle bearings, and electric PTO clutch.

Home Maintenance Products: We promise you, the first user purchaser, a 1 year warranty on all Home Maintenance Products. This will cover Push Mowers, Self Propelled Mowers, Utility Trailers, Walk-Behind Tillers, Chore Performers and Snow Throwers.

The Tecumseh engine, used on Walk Behind Snow Throwers, will carry a 2 year warranty on the engine only.

Cub Cadet Attachments:

We promise you, the first user purchaser, that we will replace or repair any part or parts which are defective in material or workmanship without charge for parts or labor during the first year following delivery to you. This will cover all *Cub Cadet* attachments. This does not include Approved Allied Equipment which is sold and warranted directly by the manufacturer.

Obtaining Warranty Service Through *Cub Cadet* Dealers

Warranty repairs will be made by your selling *Cub Cadet* dealer or any *Cub Cadet* dealer authorized to sell the type of equipment involved during the normal working hours of the dealer service department. You, the purchaser, are responsible for transportation of the equipment to the dealership for warranty service or for any service call expense, along with any overtime labor you request.

Replacement Parts Warranty

Cub Cadet parts which are furnished and installed under this warranty are themselves within the coverage of this warranty for the duration of the original warranty period or for ninety days after installation, whichever period shall expire last.

Cub Cadet
Power Equipment

What is not Covered

Tires and tubes are not covered by this warranty, but are warranted by their manufacturer. Regular maintenance replacement items such as spark plugs, ignition points, condensers, belts, cutting parts, filters and lubricants, and maintenance adjustments such as fuel system cleaning, engine tune-up, brake and/or clutch inspection or adjustment, when such replacement or adjustments are made as part of normal maintenance service, are excluded from coverage. Any non-Cub Cadet product which you may have installed in or upon the product is also excluded.

No person is authorized to give any other warranty or to assume any other liabilities on the Company's behalf unless made or assumed in writing by the Company, and no person is authorized to give any warranties or to assume any liabilities on the seller's behalf unless made or assumed in writing by the seller.

Limitations On Our Responsibility

Please carefully note that this is a two-way agreement. We promise to make free repairs or replacements as stated, but you agree, that except for our obligation to make good on this promise, we shall not be responsible for any expenses or inconvenience which you might incur or experience with respect to our product, nor shall we be liable for defects, damage, or failures caused by unauthorized alterations, unreasonable use, accident or abuse, including failure to provide reasonable and necessary maintenance, after our product has been delivered to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Personal Use

The foregoing paragraphs constitute *Cub Cadet* Corporation's entire warranty with respect to any product purchased and used for personal, family, or household purposes as distinguished from commercial usage.

Commercial Use:

All *Cub Cadet* products will be warranted against defective parts or workmanship. This is for *Cub Cadet* Tractor, Attachments and Home Maintenance products and for one year only.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE ARE EXCLUDED, AS ARE ALL OTHER REPRESENTATION TO THE USER-PURCHASER, AND ALL OTHER OBLIGATIONS OR LIABILITIES, INCLUDING LIABILITY FOR INCIDENTAL AND CONSEQUENTIAL DAMAGES, ON THE PART OF THE COMPANY OR THE SELLER.

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